N432 Newborn Care Plan

Lakeview College of Nursing

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Demographics (10 points)

Date & Time of Clinical Assessment **10/6/21 0730**	**Patient Initials** **B.G.D**	**Date & Time of Birth** **10/4/21 1018**	**Age (in hours at the time of assessment) 50H 48M**
Gender **F**	**Weight at Birth** **(gm) 2520** **(lb.) 5 (oz.) 8.9**	**Weight at Time of Assessment** **(gm) 2520** **(lb.) 5 (oz.) 8.9**	**Age (in hours) at the Time of Last Weight** **48 H**
Race/Ethnicity **African American / Black**	**Length at Birth** **Cm 48.9** **Inches 19.3**	**Head Circumference at Birth** **Cm 30.5** **Inches 12.0**	**Chest Circumference at Birth** **Cm 31** **Inches 12.2**

There are times when the weight at the time of your assessment will be the same as birth

Mother/Family Medical History (15 Points)

Prenatal History of the Mother:

GTPAL: G2T1P1A1L1

When prenatal care started: 3/30/21

Abnormal prenatal labs/diagnostics: Anemia

Prenatal complications: Intrauterine growth retardation, PID, BV.

Smoking/alcohol/drug use in pregnancy: Denies use of alcohol, tobacco, and recreational drug use.

Labor History of Mother:

Gestation at onset of labor: 38w3d

Length of labor: 16h 57m

ROM: 10/4/21 1658

Medications in labor: Epidural, oxytocin

Complications of labor and delivery: None reported.

Family History: Maternal grandfather had cancer (not specified).

Pertinent to infant: None

Social History (tobacco/alcohol/drugs): Denies use of alcohol, tobacco, and recreational drug use.

Pertinent to infant: None

Father/Co-Parent of Baby Involvement: Father involved.

Living Situation: Lives with partner.

Education Level of Parents (If applicable to parents' learning barriers or care of infant): High school, some college.

Birth History (10 points)

Length of Second Stage of Labor: 1h 14m

Type of Delivery: Induced vaginal delivery

Complications of Birth: None

APGAR Scores:

1 minute: 8

5 minutes: 8

Resuscitation methods beyond the normal needed: None

Feeding Techniques (10 points)

Feeding Technique Type: Formula

If breastfeeding:

LATCH score: n/a

Supplemental feeding system or nipple shield: n/a

If bottle feeding:

Positioning of bottle: Upright side lying

Suck strength: strong

Amount: 2 oz

Percentage of weight loss at time of assessment: 0%

If my baby lost weight, I would use this formula to calculate weight loss:

(Current weight – birth) / birth x 100

What is normal weight loss for an infant of this age?

Its normal for the infant to lose 252 gm. Newborns usually lose 10% of their birth weight during the first few days after birth but regain back within 10 days.

Is this neonate's weight loss within normal limits?

Yes. The newborn has not lost any weight; however, this is still acceptable.

Intake and Output (8 points)

Intake

If breastfeeding:

Feeding frequency: n/a

Length of feeding session: n/a

One or both breasts: n/a

If bottle feeding:

Formula type or Expressed breast milk (EBM): Similiac

Frequency: Q 2-3 H, feed on demand

Volume of formula/EBM per session: 2 oz, 20 cal/oz

If EBM, is fortifier added/to bring it to which calorie content: n/a

If NG or OG feeding:

Frequency: n/a

Volume: n/a

If IV:

Rate of flow: n/a

Volume in 24 hours: n/a

Output

Age (in hours) of first void: 31h 30m

Voiding patterns: Q 5-8 H

Number of times in 24 hours: 4x / 24h

Age (in hours) of first stool: 42h 27m

Stool patterns:

Type: tarry

Color: meconium green

Consistency: thick

Number of times in 24 hours: 2x / 24h

Laboratory Data and Diagnostic Tests (15 points)

Highlight All Abnormal Labs—Explanations must be in complete sentences and contain in-text citations in APA format.

Name of Test	Why was this test ordered for THIS client? *Complete this	Expected Results	Client's Results	Interpretation of Results

	even if these labs have not been completed*			
Blood Glucose Levels	**This test was ordered to monitor newborn hypoglycemia because the newborn is at risk due to IUGR.**	**>45**	**52, 55, 58**	**Newborns' glucose levels are within expected limits. Temporary low glucose plasma levels are typical in healthy newborns (Ricci et al., 2020). The newborn's blood glucose concentration is above hypoglycemic levels of 45 mg/dL (Ricci et al., 2020).**
Blood Type and Rh Factor	**Determines the maternal mother and newborn's blood type and RH compatibility.**	**A+, A-, B+, B-, AB+, AB-, O, O+**	**A+**	**The newborn has type A blood, positive with Rh surface antigens (Ricci et al., 2020).**
Coombs Test	**This test is not needed for the client because it only applies to those with blood type O and Rh-negative. This test is used to verify that the mother's Rh-negative blood was not sensitized (Ricci et al., 2020).**	**+, -**	**Not needed**	**N/a**
Bilirubin Level (All babies at 24 hours)	**Bilirubin is toxic to the body; elevated levels can cause**	**8mg/dl – 11.7 mg/dl**	**5.1 mg/dl, 6.3 mg/dl**	**The newborn is at low intermediate risk of developing hyperbilirubinemia.**

Utilize bilitool.org for bilirubin levels	**jaundice. Risk factors of jaundice include drugs such as oxytocin (Ricci et al., 2020). This test was conducted because the newborn is at risk due to the mother's intake of oxytocin.**			**Bilirubin monitoring is essential to establish a diagnosis of hyperbilirubinemia (Ricci et al., 2020).**
Newborn Screen (At 24 hours)	**Most states require a newborn screening test to identify the newborn's risk of developing conditions (Ricci et al., 2020).**	**Pass / fail**	**Test conducted, results not ready**	**n/a**
Newborn Hearing Screen	**The newborn does not have any risk factors, however half of newborns born with hearing dysfunction have no known risk factors (Ricci et al., 2020).**	**Pass / fail**	**Pass**	**The newborn passed an ABR or OAE screening. The newborn responded to certain tones/tapping noises indicating normal hearing (Ricci et al., 2020).**
Newborn Cardiac Screen (At 24 hours)	**The patient is not at risk for CCHD. Testing with pulse oximetry enables early detection of CCHD providing**	**P > 95%**	**100%**	**The baby's oxygen blood saturation was 100% on the left wrist and 100% on the right foot, suggesting minimal likeliness of CCHD (Ricci et al., 2020).**

	immediate treatment to the newborn (Ricci et al., 2020).			

Lab Data and Diagnostics Reference (1) (APA):

Ricci, S. S., Kyle, T., & Carman, S. (2021). Maternity and pediatric nursing (4th ed.). Wolters Kluwer.

Newborn Medications (7 points)

Brand/Generic	**Aquamephyton (Vitamin K)**	**Illotycin (Erythromycin Ointment)**	**Hepatitis B Vaccine**	**n/a**	**n/a**
Dose	**1 mg**	**5 mg/ 1g**	**0.5 mL**	**n/a**	**n/a**
Frequency	**once**	**once**	**once**	**n/a**	**n/a**
Route	**IM**	**topical**	**IM**	**n/a**	**n/a**
Classification	**Vitamin K, Nutritive agent**	**Macrolide antibiotics, Ophthalmic**	**Recombinant vaccine**	**n/a**	**n/a**
Mechanism of Action	**Catalyzes the post-translation carboxylation of peptide bound glutamic acid in inactive hepatic factors II, VII, IX,X**	**Inhibits protein synthesis by binding to the 50s subunit of bacterial ribosome**	**Body produces antibodies when exposed to the vaccine**	**n/a**	**n/a**
Reason Client Taking	**Prevents vitamin K deficiency bleeding**	**Prevent ophthalmic neonatorum**	**Provide immunity to hepatitis B**	**n/a**	**n/a**
Contraindications (2)	**Anemia, hypersensitivity to Vitamin K**	**Hypersensitivity to macrolide antibiotics, do**	**Hypersensitivity to vaccine components,**	**n/a**	**n/a**

		not take with terfenadine			
Side Effects/Adverse Reactions (2)	**Hemolysis, jaundice**	**Redness, burning**	**Fever, pain at the injection site**	**n/a**	**n/a**
Nursing Considerations (2)	**May cause gasping syndrome if containing benzyl alcohol, assess medication dilation**	**Wipe off excess after 1 minutes, Do not touch the tip to the eye,**	**Check mother's immunization status, consent form is required**	**n/a**	**n/a**
Key Nursing Assessment(s)/Lab(s) Prior to Administration	**Monitor medication for discoloration or particles, monitor INR**	**Wear gloves and open and place medication from inner canthus to outer canthus Assess hypersensitivity to macrolide antibiotics,**	**Mother's immunization status, serology test for hepatitis B**	**n/a**	**n/a**
Client Teaching needs (2)	**Monitor for s/s of anaphylaxis such as rash, itching, swelling of hands, feet, or mouth, monitor for delayed hypersensitivity reaction such as urticaria, can occur 1 year after the administration**	**Monitor for allergic reactions such as hives and difficulty breathing, be alert for chemical conjunctivitis for 1-2 days**	**Newborns should receive their first dose within 24 hours of birth, complete vaccination doses at timely intervals**	**n/a**	**n/a**

Medications Reference (1) (APA):

Jones & Bartlett Learning. (2019). 2019 Nurse's Drug Handbook. Burlington, MA

Newborn Assessment (20 points)

Area	Your Assessment	Expected Variations and Findings *This can be found in your book on page 622 in Ricci, Kyle, & Carman 4th ed 2020.	If assessment finding different from expectation, what is the clinical significance?
Skin	**Smooth, flexible, good skin turgor, well hydrated, warm**	**Smooth, flexible, good skin turgor, well hydrated, warm, jaundice, acrocyanosis, milia, Mongolian spots, stork bites**	**n/a**
Head	**Symmetric, round 30.5 cm circumference, Microcephaly**	**Microcephaly, macrocephaly, enlarged fontanels, symmetric, round, molding, caput succedaneum, cephalhematoma**	**The newborn's head is small for gestational age as 30.5 cm falls below the 10th percentile. This caused by reduction of brain volume (Ricci et al., 2020).**
Fontanels	**Soft, flat, open, anterior fontanel diamond shaped posterior fontanel, triangular shaped**	**Soft, flat, open, anterior fontanel diamond shaped posterior fontanel, triangular shaped, smooth, fused, enlarged fontanels,**	**n/a**
Face	**Full cheeks, symmetrical facial features**	**Full cheeks, symmetrical facial features, facial nerve paralysis, nevus flammeus, nevus vasculosus**	**n/a**
Eyes	**Clear, symmetrical, online with ears**	**Clear, symmetrical, online with ears, chemical conjunctivitis,**	**n/a**

		subconjunctival hemorrhages	
Nose	**Small, midline and narrow**	**Malformation, small, midline and narrow**	**n/a**
Mouth	**Aligned in midline, symmetric, intact soft and hard palate**	**Aligned in midline, symmetric, intact soft and hard palate, Epstein pearls, erupted precocious teeth, thrush**	**n/a**
Ears	**Soft and pliable with quick recoil when folded and released**	**Soft and pliable with quick recoil when folded and released, low-set ears, hearing loss**	**n/a**
Neck	**Short, creased, moves freely, baby holds head in midline,**	**Short, creased, moves freely, baby holds head in midline, restricted movement, clavicular fractures**	**n/a**
Chest	**Round, symmetric, smaller than head**	**Round, symmetric, smaller than head, nipple engorgement, whitish discharge**	**n/a**
Breath Sounds	**Symmetric, shallow, and unlabored, 40 bpm, no tachypnea/bradypnea observed, no abnormal breath sounds heard**	**Ronchi, crackles, sternal retractions, whistling, wheezing, grunting, tachypnea, bradypnea, gasping, symmetric, shallow, and unlabored, 30 – 60 bpm**	**n/a**

Heart Sounds	**144 bpm, S1 S2 auscultated, no murmur or sinus arrythmia observed**	**Sinus arrythmia, murmur, 120-160 bpm**	**n/a**
Abdomen	**Protuberant contour, soft,**	**Protuberant contour, distended, tender**	**n/a**
Bowel Sounds	**Active bowel sounds in all four quadrants**	**Absent, hyperactive, active, bowel sounds in quadrants**	**n/a**
Umbilical Cord	**Two arteries and one vein, three vessels in umbilical cord**	**Single umbilical artery and one vein (two vessels in umbilical cord)**	**n/a**
Genitals	**Swollen female genitals d/t maternal estrogen**	**Male: smooth glans, meatus centered at the tip of penis, edematous scrotum Female: swollen female genitals d/t maternal estrogen, vaginal discharge**	**n/a**
Anus	**No anal fissure/fistulas observed, meconium passed 42h after birth**	**Anal fissures/fistulas, no meconium passed within 24H after birth**	**n/a**
Extremities	**Extremities symmetric with free movement**	**Extremities symmetric with free movement, congenital hip dislocation' tuft or dimple on spine**	**n/a**
Spine	**Extremities symmetric with free movement**	**Extremities symmetric with free movement, congenital hip dislocation' tuft or**	**n/a**

		dimple on spine	
Safety • **Matching ID bands with parents** • **Hugs tag** • **Sleep position**	**Matching ID band with mom, hugs tag on left foot, supine sleeping position**	**Findings vary**	**Findings vary**

Complete the Ballard Scale grid at the end to determine if this infant is SGA, AGA, or LGA—be sure to show your work
Posture (4) + Square window (4) + Arm recoil (4) + Popliteal angle (4) + Scarf sign (4) + heal to ear (4) = 20 total neuromuscular maturity score
Skin (1) + Lanugo (-1) + Plant surface (0) + breast (3) + eye/ear (3) + female genitals (4) = 10 total physical score

What was your determination?
The newborn is appropriate for gestational age (AGA). The newborn's weight (2520 gm) and length (48.9 cm) fall under the 10th to 90th percentile indicating appropriate gestational age.

Are there any complications expected for a baby in this classification?
There are no complications expected for a baby in this classification

Vital Signs, 3 sets (6 points)

Time	**Temperature**	**Pulse**	**Respirations**
Birth	**98.3 F**	**136 bpm**	**42 bpm**
4 Hours After Birth	**97.8 F**	**140 bpm**	**42 bpm**
At the Time of Your Assessment	**98.2 F**	**144 bpm**	**40 bpm**

Vital Sign Trends: Vital signs are stable and all within expected limits. No abnormal findings were reported.

Pain Assessment, 1 set (2 points)

Time	**Scale**	**Location**	**Severity**	**Characteristics**	**Interventions**

9:30	**NIPS**	**n/a**	**0**	**n/a**	**n/a**

Summary of Assessment (4 points)

The newborn was delivered on 10/4/21 1018 by induced vaginal delivery. Prenatal history is complicated by IUGR, BV, and PID. The newborn is appropriate for gestational age (AGA) at 38w 3d, weighing 2520, and was 48.9 cm long at birth. Apagar scores are 8 during 1 minute and 8 during 5 minutes. Newborn's assessments are within normal limits. No abnormalities were reported or observed during physical and laboratory testing. The newborn's last vitals were stable at 98.2 F, 144 beats per minute, and 40 respirations per minute. The newborn is formula-fed Q 2-3 H or by demand. The newborn and mother are expected to be discharged this afternoon and will educate on formula feedings.

Nursing Interventions and Medical Treatments for the Newborn (6 points)

Nursing Interventions and Medical Treatments (Identify nursing interventions with "N" after you list them, identify medical treatments with "T" after you list them.)	Frequency	Why was this intervention/ treatment provided to this patient? Please give a short rationale.
Swaddling the newborn tightly - N	**PRN**	**Swaddling the newborn provides a sense of security and comfort and decreases irritability.**
Feeding the baby with formula - N	**Q 2-3 H, as demanded**	**Feeding the baby Q 2-3 H promotes growth and increase in nutritional intake. Feeding is also comforting to the baby.**
Changing the baby's diapers - N	**PRN, 6-12x a day**	**Having a clean diaper is comfortable to baby.**
Burping the baby - N	**Every ounce of formula, after every feeding**	**Burping the baby prevent gas buildup in the stomach, promoting comfort.**

Discharge Planning (2 points)

The newborn will be discharged this afternoon (10/6/21) and reside with the parents. The newborn does not need any discharge equipment. The newborn will follow up with the pediatrician within 24-48 hours to assess development. The parents will need to be educated on proper formula-feedings regarding feeding positions and preparation.

Nursing Diagnosis (30 points)
Must be NANDA approved nursing diagnosis and listed in order of priority
Two of the Nursing Diagnoses must be education related i.e. the interventions must be education for the client."

2 points for correct priority

Nursing Diagnosis (2 pt each) Identify problems that are specific to this patient. Include full nursing diagnosis with "related to" and "as evidenced by" components	**Rational (1 pt each)** Explain why the nursing diagnosis was chosen	**Intervention/Rational (2 per dx) (1 pt each)** Interventions should be specific and individualized for his patient. Be sure to include a time interval such as Assess vital signs q 12 hours." List a rationale for each intervention and using APA format, cite the source for your rationale.	**Evaluation (2 pts each)** • How did the patient/ family respond to the nurse's actions? • Client response, status of goals and outcomes, modifications to plan.
1. Ineffective infant feeding pattern related to bottle feeding as evidenced by the baby getting sleepy during feedings.	**The parents reported that the newborn kept falling asleep during feedings preventing sufficient nutritional intake.**	**1.Stroke the newborn's feet or head when they start falling asleep during feedings.** **Rationale** **Physical stimulation will help keep the newborn stay awake (Ricci et al., 2020).** **2.Feed the newborn in the room with adequate light** **Rationale** **Some newborns vary in level of activity and stimulation (Ricci et al., 2020). A well-lit room may help keep the bay awake during feedings.**	**1. Stroking the newborn's head during feedings provided light stimulation. The child was able to stay awake during feedings and increased their intake of formula.** **2. Feeding the child in a well-lit room provided minimal stimulation. The child was able to stay awake during the feedings. The newborn increased their intake of formula, promoting growth and development.**

2. Risk for delayed development related to head circumference <10th percentile as evidenced by head measurement of 30.5 cm	**The child's head falls in the <10th percentile and may indicate an intellectual disability; however, this is not always the case. Some babies with small heads can have normal intelligence.**	**1. Before discharge, encourage the parents to monitor the child's development through health surveillance.** **Rationale** **Nursing care should focus on determining the extent of possible neurological and cognitive deficits that the child may have. (Ricci et al., 2020). The nurse should encourage the parents to monitor the child and ensures that they are meeting developmental milestones.** **2. Before discharge, encourage the patient to remain compliant with follow-up checkups.** **Rationale** **Attending follow-up pediatrician check-ups is essential in assessing a newborn's growth and development (Ricci et al., 2020).** **1.**	**1. The parents monitored their baby closely. The parents observed that the child was meeting developmental milestones.** **2. Compliancy with pediatrician appointments enabled close observations of the child. Measurement of the head was taken, and growth was reported.**
3. Deficient knowledge related to feeding to newborn, as evidenced by patient's choice to formula feed.	**The mother has chosen to formula feed their newborn. Proper education on formula feedings ensures safe and adequate nutritional intake.**	**1. Educate other on formula preparation before discharge** **Rationale** **Boiling water used in the preparation and ensuring proper dilation of the formula promotes adequate nutritional intake (Ricci et al., 2020).** **2. Educate the mother to support the newborn's**	**1. The formula was properly mixed with the correct amount of water as specified by the label. The newborn's nutritional intake was sufficient, promoting growth and development.** **2. Newborn aspiration and formula backwash was prevented by raising the head**

		head slightly up before discharge **Rationale** **Raising the newborn's head prevents aspiration and backwashing into the eustachian tube (Ricci et al., 2020).**	**slightly. Raising the head slightly also prevented ear infections.**
4. Deficient knowledge related to consoling baby as evidenced by newborn crying.	**Upon entering the room, the newborn was crying in the mothers' arms.**	**1. Before discharge, educate the mother to provide the newborn with a pacifier to prevent fussiness** **Rationale** **The pacifier encourages the sucking reflex, promoting breastfeeding and consolability (Ricci et al., 2020).** **2. Before discharge, educate the mother on how to swaddle the newborn** **Rationale** **Swaddling, the newborn, provides a sense of security and comfort (Ricci et al., 2020).**	**1. The newborn was given a pacifier and was soothed to sleep.** **2. The newborn was swaddled snuggly and was soothed to sleep as they felt calm secure (Ricci et al., 2020).**

Other References (APA):

Ricci, S. S., Kyle, T., & Carman, S. (2021*). Maternity and pediatric nursing* (4th ed.). Wolters Kluwer.

Ballard Gestational Age Scale

Neuromuscular Maturity

Score	−1	0	1	2	3	4	5
Posture							
Square window (wrist)	 > 90°	 90°	 60°	 45°	 30°	 0°	
Arm recoil		 180°	 140–180°	 110–140°	 90–110°	 < 90°	
Popliteal angle	 180°	 160°	 140°	 120°	 100°	 90°	 < 90°
Scarf sign							
Heel to ear							

Physical Maturity

Skin	Sticky, friable, transparent	Gelatinous, red, translucent	Smooth, pink, visible veins	Superficial peeling and/or rash; few veins	Cracking, pale areas; rare veins	Parchment, deep cracking; no vessels	Leathery, cracked, wrinkled
Lanugo	None	Sparse	Abundant	Thinning	Bald areas	Mostly bald	
Plantar surface	Heel-toe 40–50 mm: −1 < 40 mm: −2	> 50 mm, no crease	Faint red marks	Anterior transverse crease only	Creases anterior 2/3	Creases over entire sole	
Breast	Imperceptible	Barely perceptible	Flat areola, no bud	Stippled areola, 1–2 mm bud	Raised areola, 3–4 mm bud	Full areola, 5–10 mm bud	
Eye/Ear	Lids fused loosely: −1 tightly: −2	Lids open; pinna flat; stays folded	Slightly curved pinna; soft; slow recoil	Well curved pinna; soft but ready recoil	Formed and firm, instant recoil	Thick cartilage, ear stiff	
Genitals (male)	Scrotum flat, smooth	Scrotum empty, faint rugae	Testes in upper canal, rare rugae	Testes descending, few rugae	Testes down, good rugae	Testes pendulous, deep rugae	
Genitals (female)	Clitoris prominent, labia flat	Clitoris prominent, small labia minora	Clitoris prominent, enlarging minora	Majora and minora equally prominent	Majora large, minora small	Majora cover clitoris and minora	

Maturity Rating

Score	Weeks
−10	20
−5	22
0	24
5	26
10	28
15	30
20	32
25	34
30	36
35	38
40	40
45	42
50	44

CLASSIFICATION OF NEWBORNS (BOTH SEXES) BY INTRAUTERINE GROWTH AND GESTATIONAL AGE [1,2]

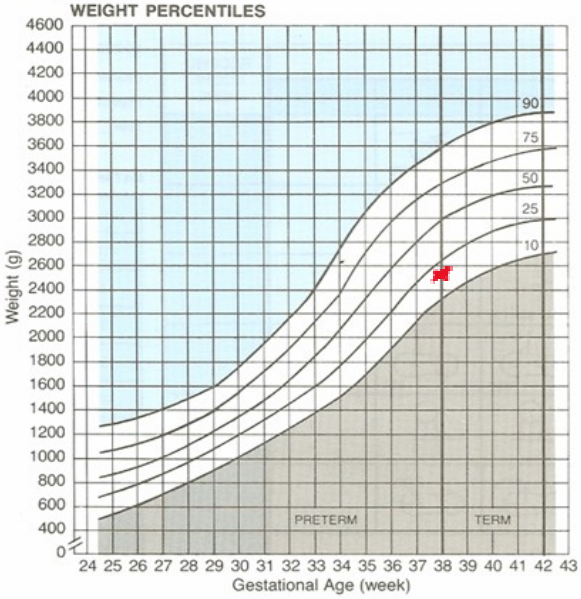
NAME _____ DATE OF EXAM _____ LENGTH _____

HOSPITAL NO. _____ SEX _____ HEAD CIRC. _____

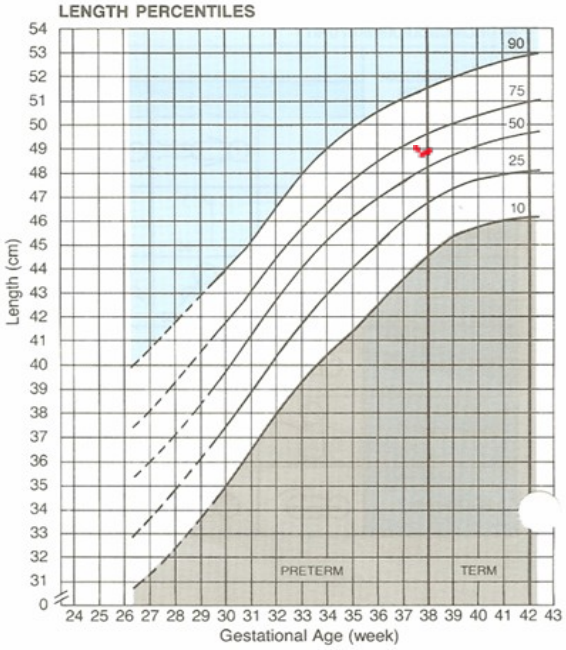
RACE _____ BIRTH WEIGHT _____ GESTATIONAL AGE _____

DATE OF BIRTH _____

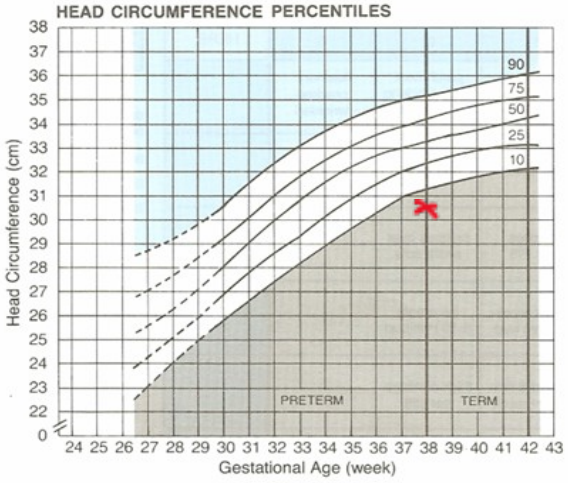
WEIGHT PERCENTILES



LENGTH PERCENTILES



HEAD CIRCUMFERENCE PERCENTILES



CLASSIFICATION OF INFANT*	Weight	Length	Head Circ.
Large for Gestational Age (LGA) (>90th percentile)			
Appropriate for Gestational Age (AGA) (10th to 90th percentile)	X	X	
Small for Gestational Age (SGA) (<10th percentile)			X

*Place an "X" in the appropriate box (LGA, AGA or SGA) for weight, for length and for head circumference.

References
1. Battaglia FC, Lubchenco LO: A practical classification of newborn infants by weight and gestational age. J Pediatr 1967; 71:159-163