

1.4 pg. 38 #1-9 All, 17-59 odds

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- 1) irrational numbers
- 2) Rational numbers
- 3) Counting numbers
- 4) Integers
- 5) Line
- 6) empty
- 7) whole
- 8) Rational number
- 9) $\sqrt{3}$

17) True

19) False

21) False

23) True

25) false

27) False

29) True

31) True

33) True

35) False

37) True

39) True

41) False

43) True

45) True

47) True

49) a) 0, 3, 77

b) 0, 3, 77

c) 0, -2, 3, 77

d) $-\frac{5}{7}, 0, -2, 3, 6\frac{1}{4}, 1.6\bar{2}, 77$

e) $\sqrt{7}, -\sqrt{3}$

f) $-\frac{5}{7}, 0, -2, 3, 6\frac{1}{4}, \sqrt{7}, -\sqrt{3}, 1.6\bar{2}, 77$

51) a) 13

b) -2, 13

c) -2, 13

d) 13

53) -3, 0, 2

55) $-\sqrt{3}, -\sqrt{2}, -\sqrt{5}$

57) 0.6, -5, 0

59) 0, 1, 2

1,3 pg. 30 all that end in n9 though 109 and
31-43 odds 87 + 88

9) To perform the division $\frac{4}{7} \div \frac{2}{3}$ we rewrite it
using multiplication as $\frac{4}{7} \cdot \left(\frac{3}{2}\right)$

19) GCF 60 and 80 is (20)

29) Simplify $\frac{18}{42} = \left(\frac{3}{7}\right)$

39) Convert mixed number to a fraction
 $3\frac{5}{18} = \left(\frac{59}{18}\right)$

49) $\frac{\frac{5}{12}}{3} \cdot \frac{\frac{1}{4}}{3} = \left(\frac{1}{9}\right)$

59) $5\frac{3}{8} \div 1\frac{1}{4} = \frac{43}{8} \div \frac{5}{4} = \frac{43}{8} \cdot \frac{4}{5} = \frac{43}{10}$ $10 \overline{) \frac{43}{40}} = \left(4\frac{3}{10}\right)$

69) $2\frac{9}{17} + \frac{2}{34} = \frac{18}{34} + \frac{2}{34} = \frac{20}{34} = \left(\frac{10}{17}\right)$

79) $9\frac{2}{5} - 6\frac{1}{2} = \frac{2 \times 47}{2 \times 5} - \frac{13 \times 5}{2 \times 5} = \frac{94}{10} - \frac{65}{10} = \frac{29}{10}$ $10 \overline{) \frac{29}{20}} = \left(2\frac{9}{10}\right)$

89) $2\frac{5}{6} \cdot 1\frac{2}{3} = \frac{17}{6} \cdot \frac{5}{3} = \frac{85}{18}$ $18 \overline{) \frac{85}{72}} = \left(4\frac{13}{18}\right)$

99) $10\frac{1}{4} - 8\frac{3}{5} = \frac{5 \times 41}{5 \times 4} - \frac{43 \times 4}{5 \times 4} = \frac{205}{20} - \frac{172}{20} = \frac{33}{20}$ yvoonne rebert
 $20 \overline{) 33} \begin{array}{r} 1 \\ 20 \\ \hline 13 \end{array}$
 $\rightarrow = 1\frac{13}{20} \text{ mins.}$

109) $\frac{97}{154} = 1 = \frac{97}{154} = \frac{154 \times 1}{1 \times 1} - \frac{97}{154} = \frac{154-97}{154} = \frac{57}{154} ?$

31) $\frac{18}{49} = \text{already simplified}$

33) $\frac{100}{150} = \frac{2}{3}$

35) $2\frac{13}{15} = \frac{43}{15}$

37) $12\frac{2}{5} = \frac{62}{5}$

39) $3\frac{5}{18} = \frac{59}{18}$

41) $\frac{7}{4} = 4\frac{1}{4} = 1\frac{3}{4}$

43) $\frac{13}{4} = 4\frac{1}{4} = 3\frac{1}{4}$

$$87) a. \frac{3 \times 3}{3 \times 4} + \frac{2 \times 4}{3 \times 4} = \frac{9}{12} + \frac{8}{12} = \frac{17}{12} = 12 \overline{) \frac{17}{12}} = \left(1 \frac{5}{12} \right)$$

$$b. \frac{3 \times 3}{3 \times 4} - \frac{2 \times 4}{3 \times 4} = \frac{9}{12} - \frac{8}{12} = \left(\frac{1}{12} \right)$$

$$c. \frac{3}{4} \cdot \frac{2}{3} = \frac{6}{12} = \left(\frac{1}{2} \right)$$

$$d. \frac{3}{4} \div \frac{2}{3} = \frac{3}{4} \cdot \frac{3}{2} = \frac{9}{8} = 8 \overline{) \frac{9}{8}} = \left(1 \frac{1}{8} \right)$$

$$88) a. \frac{5}{6} \div \frac{3}{8} = \frac{5}{6} \cdot \frac{8}{3} = \frac{40}{18} = 18 \overline{) \frac{40}{36}} = 2 \frac{4}{18} = \left(2 \frac{1}{6} \right) ?$$

$$b. \frac{4 \times 5}{4 \times 6} + \frac{3 \times 3}{8 \times 3} = \frac{20}{24} + \frac{9}{24} = \frac{29}{24} = 24 \overline{) \frac{29}{24}} = \left(1 \frac{5}{24} \right)$$

$$c. \frac{4 \times 5}{4 \times 6} - \frac{3 \times 3}{3 \times 8} = \frac{20}{24} - \frac{9}{24} = \left(\frac{11}{24} \right)$$

$$d. \frac{5}{6} \cdot \frac{3}{8} = \frac{15}{48} = \left(\frac{5}{16} \right)$$

Ones = all that end in $n1 - 91$

1) $|a| - |a| = \textcircled{0}$

11) $|7| = \textcircled{7}$

21) a. $7 < 13$ b. $-7 > -13$ c.

31) $0.1 < 0.3$

41) $-0.08 < -0.095$

51) $-0.8 < -\frac{3}{5} = -0.6$

61) $4 - 11 \div -\frac{9}{2} = 4 > \frac{9}{2} = 4\frac{1}{2}$

71) $\frac{1}{2} \cdot \frac{1}{2} < \frac{1}{2} \div \frac{1}{2} = \frac{1}{2} \cdot \frac{2}{1} = \frac{2}{2} = 1$

81) ~~1, 2, 3, 9, 10, 11~~

91) a) middle

101) b) 5, 5.5, 5.8

c) NO, because it is actually the number 4 and not in between 4 and 6. 5 is

91) (d) yes, because 5 is in the middle of 4 and 6

(e) yes, because they fall in between them.