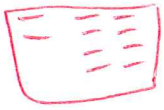
Name: Answers Date: _____ Period: ____

Lesson 3.1.2 Homework Problems 3-19 to 3-23

3-19. Show the numbers of + and – tiles represented by each expression below. **Sketch each model** and state the number that it represents.

a. $(-2)+(-6)$

-8



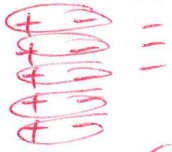
Answer: (-8)

b. $(-2)+4+(-2)$

-- ++ --
++
-4+4

Answer: 0

c. $5+(-8)$



Answer: (-3)

3-20. Circle each term in the expressions below. Then simplify each expression.

a. $-8+2(-5)$

$-8+(-10)$

-18

b. $3(7.5+2)+4.6$

$3(9.5)+4.6$

$28.5+4.6$

33.1

c. $4\frac{1}{2}(-2+1+7)$

$4.5(-1+7)$

$4.5(6)$

27

d. $5(6+2)+4+2(-5+8)$

$5(8)+4\ 2(3)$

$40+4+6$

50

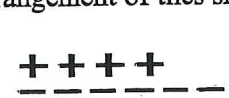
3-21. Justin is working with the integer tiles shown in the diagram at right.

a. What is the value of Justin's diagram? 0

b. If Justin removes three positive tiles, what will the value be? -3

c. If Justin starts with the original diagram and removes three negative tiles, what will the value be? 3

d. Justin has a new arrangement of tiles shown below. If he removes four positive tiles, what is the value?



(-6)

3-22. Linh has a bag of beads that contains 10 glass beads, 7 metal beads, 15 plastic beads, and 3 clay beads. For each part below, if the bead selected is replaced before the next draw, what is the probability that Linh will pull out a…

a. Metal bead?

$P(\text{metal bead}) = \frac{7}{35} = \frac{1}{5}$

b. Bead that is not plastic?

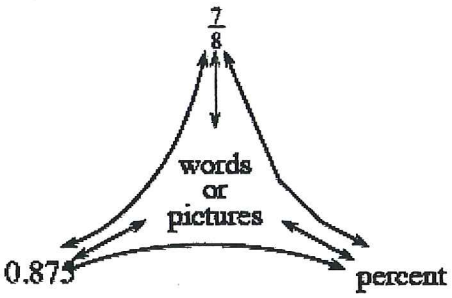
$P(\text{not plastic}) = \frac{20}{35} = \frac{4}{7}$

c. Glass or plastic bead?

$P(\text{glass or plastic}) = \frac{10}{35} + \frac{15}{35} = \frac{25}{35} = \frac{5}{7}$

3-23. Copy each portions web below and fill in the missing parts.

a.

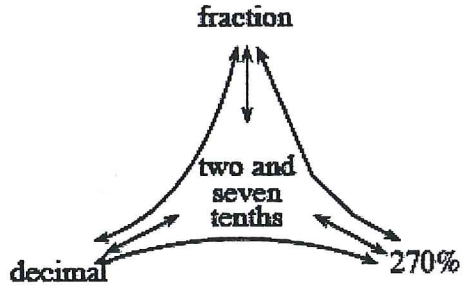


87.5%

Words or pictures: seven eighths

Percent: 87.5%

b.



2.7

Decimal: 2.7 Fraction: $2\frac{7}{10}$