

Name: _____

Date: _____ Per: _____

Lesson 3.3.3 Homework

3-120. Hilda was simplifying some numerical expressions and made each of the following sequences of calculations. Name the mathematical property, operation, or idea that justifies how Hilda went from each step to the next step.

a. $5 \left(-\frac{4}{3}\right) \cdot \left(\frac{2}{5}\right)$
 $= \left(-\frac{4}{3}\right) \cdot 5 \cdot \left(\frac{2}{5}\right)$
 $= \left(-\frac{4}{3}\right) \cdot \left(5 \cdot \left(\frac{2}{5}\right)\right)$
 $= \left(-\frac{4}{3}\right) \cdot \left(\frac{2}{1}\right) = -\frac{8}{3} = -2\frac{2}{3}$

b. $17 + 29 + 3 + 1$
 $= 17 + 3 + 29 + 1$
 $= (17 + 3) + (29 + 1)$
 $= 20 + 30$
 $= 50$

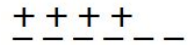
3-121. Simplify each of the following expressions.

a. $3 + 4(10 - 8)$

b. $3 + 4 \cdot 10 - 8$

c. $(3 + 4)(10 - 8)$

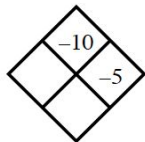
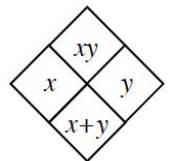
3-122. Refer to the diagram at right to answer the questions below.



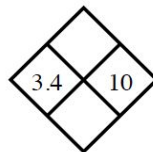
a. Copy the diagram and add two tiles so that the result is a value of -2 . You can add positive and/or negative tiles. Show the tiles you added to get this answer.

b. Copy the diagram again, but this time remove four tiles (again positives and/or negatives) so that the result is a value of 2 . Show the tiles you removed to get this answer.

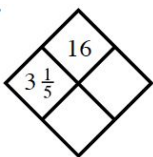
3-123. Copy and complete each of the Diamond Problems below. The pattern used in the Diamond Problems is shown at right.



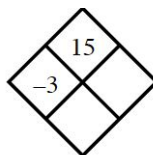
a.



b.



c.



d.

3-124. Greta is trying to determine the portion of green candies in various bags of green and yellow candies. Using the information below, determine the portion of green candies in each bag.

a. Bag A: Two thirds of the candies are yellow. What portion of the candies is green?

b. Bag B: 29% of the candies are yellow. What portion of the candies is green?

c. Bag C: 4 out of every 9 candies are yellow. What portion of the candies is green?

3-125. Solve the following problems without paper or pencil. Just write the answer but be ready to explain your thinking.

a. $2\frac{1}{2} \div \frac{1}{2}$

b. $2\frac{2}{3} \div \frac{1}{3}$

3-126. Simplify each of the following expressions.

a. $3 - 2 \cdot 5$

b. $7(4 + 3 \cdot 2)$

c. $10 - 6 \div 2 \cdot 4 + 2$

3-127. Four friends worked together to wash all of the cars that the Kish family owns. They received \$42.36 for doing the work and agreed to divide the earnings evenly. How much money will each friend earn? Show how you know.

3-128. Find each product. Express your answer as both a fraction and a decimal.

a. $1.25 \cdot (-\frac{3}{5})$

b. $(-3\frac{2}{7}) \cdot 0.14$

c. $-4.37 \cdot (-5.2)$