Math 3 Classwork 16

Warm Up

1

a) Insert brackets to the following number sentences to make the equality correct.

$$5 \times 154 + 46 = 1000$$

b) Compare:

$$28 + b _{2} 28 + (b + 1)$$

$$43 - (c + 4) \underline{\hspace{1cm}} 43 - c$$

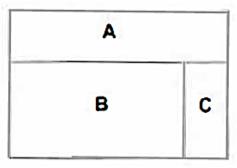
$$28+b _{--} 28 + (b-1)$$

$$32 - x_{\underline{\hspace{1cm}}} 32 - (x - 2)$$

$$58 - (p - 6) ___ 58 - p$$

2

How many rectangles are there in the picture? List them all:



3

Rank the children of the age line:

- •Angie is older than Arthur
- •Bob is younger than Katie
- •Carl is the oldest
- •Artur is older than Katie

Young

Old

Homework Review

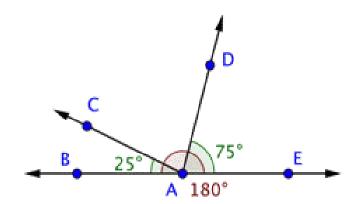
4.

Below is a drawing of a straight angle $\angle BAE$ (remember that a straight angle is always 180°). The angle $\angle DAE$ equals 75° and the angle $\angle BAC = 25^{\circ}$.



b) Find an angle
$$\angle BAD = \underline{\hspace{1cm}}$$

a) Find an angle
$$\angle CAE =$$



5

Calculate:

$$6 \times 6 \div 6 =$$

$$7 \div 1 \times 7 =$$

$$30 \div 30 \times 30 =$$

New Material I

Multiplication and division are inverse operations.

It means that if we take a number and multiply it by another number and then divide the result by the same number, we will end up with our initial number.

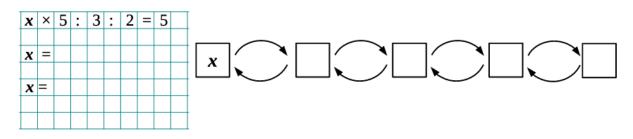
$$11 \times 2 \div 2 = 11$$

$$34 \times 9 \div 9 = 34$$

$$52 \div 26 \times 26 = 52$$

Analyze the operations and undo them to solve the equation:

6



How to solve equations with division.

To solve for x the following equation: 5x = 25, we have to "undo" multiplying by 5. So, we have to divide BOTH part of equation (this is an equation, remember?) by 5.

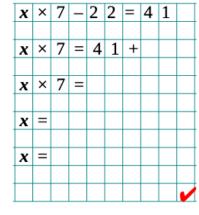
$$5x \div 5 = 25 \div 5$$

$$x = 5$$

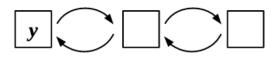
Let's check our work (always do it!): $5 \times x = 25$, using the solution we found, we write:

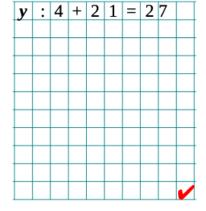
 $5 \times 5 = 25$ or 25 = 25! Our solution is correct.

7. Solve the equations (use drawings):









8.

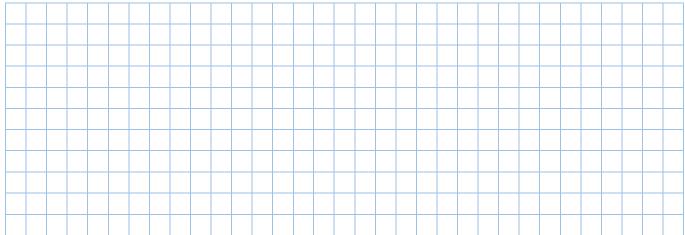
Solve for x and check your answer:

a)
$$8 \div x = 4$$

b)
$$x \div 20 = 2$$

c)
$$x \times 12 = 48$$





9

Children were making bracelets. To make 4 bracelets, they need 80 beads, the same number for each bracelet. How many beads do they need to make 5 bracelets?

10

a) Julia and Victoria had 24 candies and they decided to equally divide all candies between two of them. How many candies did each girl get? ______

b) Then Jonathan came and asked girls to share their candies with him as well. Girls decided to share all 24 candies equally between 3 of them. Is it possible? How many candies will each child get? ______

c) Then Eli joined them and asked to give him some candies as well. Girls were very kind and decided to share all 24 candies equally between 4 of them. Is it possible? How many candies will each child get? _____

- d) And then Steven and Milan came and ... asked for candies! Now girls have to share their 24 candies with 6 children. Is it possible? How many candies will each child get?
- 11

Mark the order of operations and calculate:

$$1$$
 2

$$24:6 \times 2 =$$

$$8 \times 3 + 5 \times 4 =$$

$$43 + 20 - 5 =$$

$$(18+3):3=$$

REVIEW

12

Calculate using correct units:

$$1 \text{ kg} \times 4 =$$

$$1 \text{ m} \times 7 =$$

$$1 \text{ kg} \times 4 = \underline{\hspace{1cm}} 1 \text{ m} \times 7 = \underline{\hspace{1cm}} 1 \text{ egg} \times 4 = \underline{\hspace{1cm}}$$

$$3 l \times 3 =$$

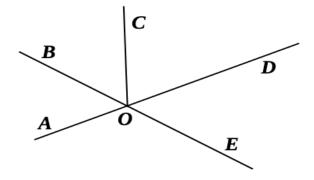
$$1 \sec \times 6 = \underline{\hspace{1cm}}$$

$$3 l \times 3 =$$
 _____ 1 sec $\times 6 =$ _____ 10 mg $\times 3 =$ _____

13

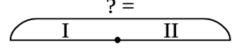
Find all pairs of supplementary angles on the drawing. Measure these angles with a protractor. Write down your results. Make sure supplementary angles add up to 180°.

If $\angle AOB = 50^{\circ}$ then $\angle BOD = \underline{\hspace{1cm}}$

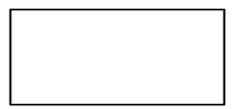


14

Choose the correct sketch for each problem, use them and write the expressions:



a) There are 5 eggs in a basket. There are b eggs in another basket. How many eggs are in both baskets?



b) There are 5 eggs in each of b baskets. How many eggs are in all these baskets?





Challenge Yourself

14

Solve each word problem:

a) A line segment was split into 8 parts. Each part was further split into 5 sections. How many sections was the segment split into?



b) A watermelon can be balanced on a scale by x apples. An apple can be balanced by qstrawberries. How many strawberries are needed to balance a watermelon?