## MATH 5: HANDOUT 2 **REVIEW II**

## This week we reviewed following topics in the class

- Fractions.
- Negative numbers. Addition, subtraction, comparison. Multiplication and division of negative numbers.
- Distributivity. Opening the parentheses.
- Solving basic equations.

THIS TOPIC WE HAVEN'T REVIEWED YET, CHALLENGE YOURSELF AND CONTINUE REFRESHING YOUR MATH **SKILLS** 

- Speed, time, distance problems.
- Basic geometric concepts. Angles.
- Quadrilaterals: parallelogram, rectangle, square, rhombus.
- Areas. Area of triangle, trapezoid, parallelogram.

## **PROBLEMS**

1. Compute:

(a) 
$$(-7) + (-9) =$$

(b) 
$$3 + (-6) + (-7) =$$

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$$(-7) + (-9) =$$
 (b)  $3 + (-6) + (-7) =$  (c)  $(-3) + 5 + (-7) =$ 

**2.** Compute:

(a) 
$$(-6) \div (-2) + 3$$
 (b)  $(-2) \div (-3)$  (c)  $(-4) \times (-7) \div 9$ 

(b) 
$$(-2) \div (-3)$$

(c) 
$$(-4) \times (-7) \div$$

**3.** Solve the following equations:

(a) 
$$(-2) \times x = -7$$

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 (b)  $(-3) \times x + 2 = x - 18$ 

**4.** Simplify the following expressions:

(a) 
$$2(x+y)-2(x-y)$$

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 (b)  $1-2(1-2(1-2x))$ 

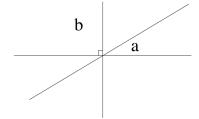
**5.** Solve the following equations:

(a) 
$$5(x-2)=25$$

b) 
$$4x = 2x + 8$$

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 (c)  $(-2x) + 3 - (-5x) - (-7) = -(-1)$ 

- **6.** A boat has speed of 8 miles per hour (mph).
  - (a) Two towns, A and B, are on the shores of a lake. How long would it take the boat to go from A to B and back if the distance between the towns is 10 miles?
  - (b) Two other towns, C and D, also 10 miles apart, are on a river: C is upstream, D is downstream. The river flows at the speed of 2 mph. How long will it take the boat to go from C to D? from D to C?
  - 7. In the figure on the right,  $\angle a = 30^{\circ}$  and  $\angle b$  is the right angle. Can you find the sizes of all other angles in the figure?



**8.** Find the angle between the two clock hands at 12:20.

**9.** Compute the area of the figures below. The picture is not to scale, so do not try measuring the lengths - use the numbers given. In the last one, find the area of the shaded part.

