

Warmup

1. A _____ rate compares _____ measurements.
A _____ is in the denominator.

2. How many inches are in a foot?

3. Write the set of each numbers listed

Integers: _____

Counting numbers: _____

Whole numbers: _____

4. $-5 - -7 =$ _____

$-6 - 3 =$ _____

$4 - 1 =$ _____

$-8 - 0 =$ _____

5. Solve and Check
 $X - 10 = 8$

I. Metric System Equivalent Measures

$$\frac{10 \text{ mm}}{1 \text{ cm}} =$$

Metric Equivalent Measures

$$10 \text{ mm} = 1 \text{ cm}$$

$$100 \text{ cm} = 1 \text{ m}$$

$$1000 \text{ m} = 1 \text{ km}$$

The identity of multiplication is _____ because $x \cdot \underline{\hspace{1cm}} = x$

Convert 5 cm to mm

$$\frac{5 \text{ cm}}{1} \cdot \frac{10 \text{ mm}}{1 \text{ cm}} =$$

Complete each equation

_____ mm = 1 cm

_____ cm = 1 m

_____ m = 1 km

6.

II. US Customary Volume and Capacity Equivalent Measures



Convert 4 cups to pints

Convert 26 cups to pints

7.

Us Customary Volume and Capacity Equivalent Measures

$$8 \text{ ounces} = 1 \text{ cup}$$

$$2 \text{ cups} = 1 \text{ pint}$$

$$2 \text{ pints} = 1 \text{ quart}$$

$$4 \text{ quarts} = 1 \text{ gallon}$$

III. US Customary Time Equivalent Measures

Convert 3 hours to minutes

Convert 15 months to years

Us Customary Time Equivalent Measures



60 seconds = 1 minute

60 minutes = 1 hour

24 hours = 1 day

7 days = 1 week

52 weeks = 1 year

365 days = 1 year

366 days = 1 leap year

12 months = 1 year

8.

IV. US Customary Length Equivalent Measures



Convert 24 inches to feet

Convert 2 miles to yards

9.

Us Customary Length Equivalent Measures

12 inches = 1 foot

3 feet = 1 yard

5280 feet = 1 mile

1760 yards = 1 mile

V. Inequalities

Arithmetic Inequality

6 is greater than 4

$$6 > 4$$

9 is fewer than 30

$$9 < 30$$

Algebraic Inequality

x is no more than 4

$$x \leq 4$$

B is at least 6

$$B \geq 6$$

Inequalities

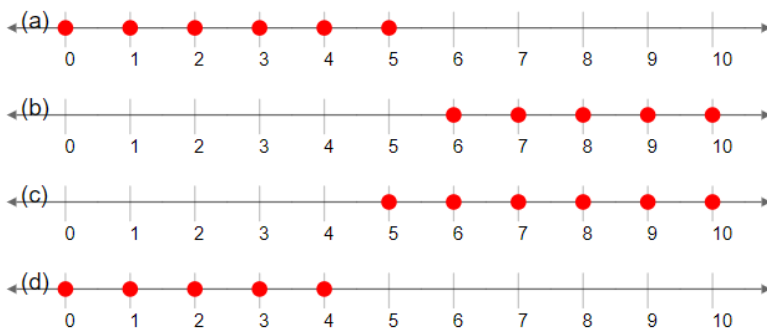
<	>	≤	≥
less than	greater than	less than or equal to	greater than or equal to
fewer than	more than	no more than	no less than
up to	exceeds	at most	at least
	in excess of		

VI. Inequalities on the Number Line (Integers)

What integers from 0 to 10 make $X < 5$ a true statement?

10.

Graph $X < 5$ for the set of integers.



VII. Inequalities on the Number Line (Real Numbers)

Real Numbers are numbers include the negative numbers, positive numbers and zero. A real number can have a fraction or a decimal part.

2.25 -9.78 $-\frac{2}{3}$ 0

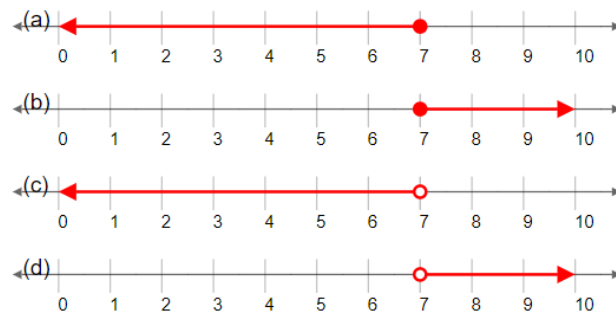
The circle over the number is determined by the inequality.

- Use an open circle for $<$ or $>$
- Use a closed circle for $\leq$ or $\geq$

What real numbers make $S \geq 7$ a true statement?

What real numbers make $S < 7$ a true statement?

Graph $S \geq 7$ for the set of real numbers.



11.

VIII. Practice

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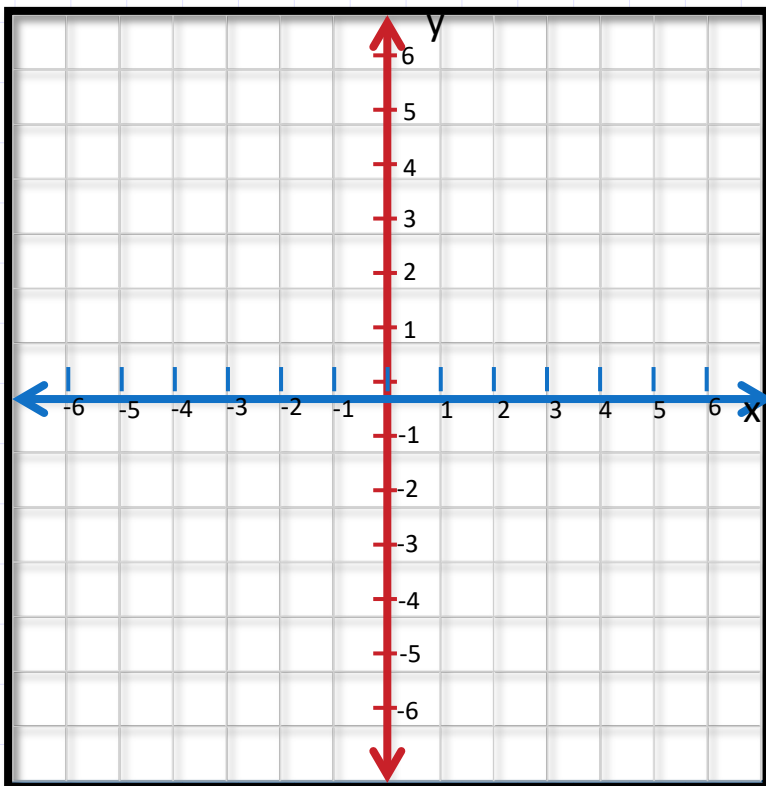
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