# Warmup 10/ (# of vowels + consonants in the alphabet)

### Each group needs a giant whiteboard, marker, eraser!!!

1) Find the slope between (4, -3) and (-2, 3).

2) Find the equation.

| X | У  |
|---|----|
| 2 | 10 |
| 4 | 22 |
| 6 | 34 |
| 8 | 46 |

- 3) This table is:
- A. Not linear
- B. Linear but not proportional
- C. Linear and proportional

| X | 2  | 3  | 6  | 8  |
|---|----|----|----|----|
| у | 10 | 14 | 26 | 34 |

Go over
Table/Graph/Equation/Situation
Problems

## Which representation would be most useful?

- For each, choose which would be the most useful, and explain why:
  - The equation
  - The table
  - The graph
  - The verbal description
- Problem D: "The temperature was -11°F and has risen
   4.5° per day."

# Most useful representation?

- 1. What is the temperature after 2 days?
- 2. How quickly is the temperature rising?
- 3. What is the temperature after 30 days?
- 4. When does the temperature hit 0°?

#### **Verbal Description**

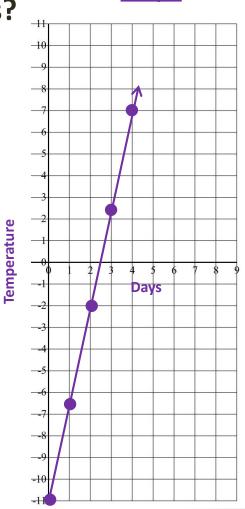
"The temperature was -11°F and rose 4.5° per day."

#### **Table**

| x (days) | y (°F) |
|----------|--------|
| 0        | -11    |
| 1        | -6.5   |
| 2        | -2     |
| 3        | 2.5    |
| 4        | 7      |

#### **Equation**

$$y = -11 + 4.5x$$



Graph

The graphs below show the distance two cars have traveled along the freeway over a period of several seconds. Car A is traveling 30 meters per second.

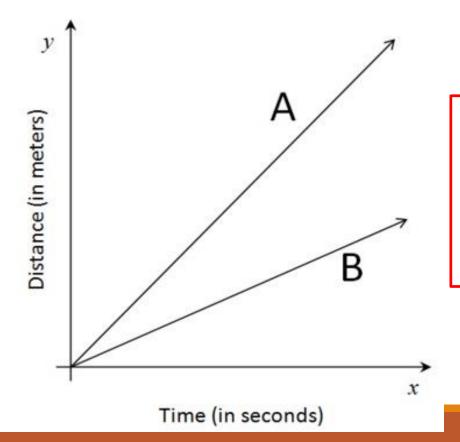
Which equation from those shown below is the best choice for describing the distance traveled by car B after  $m{x}$  seconds? Explain.

a. 
$$y = 85x$$

b. 
$$y = 60x$$

c. 
$$y=30x$$

$$\mathsf{d.}\ y = 15x$$



D (B is less steep than A, so the slope must be less than 30)

# Shipping packages...

At a different company, a 3 ounce package cost \$2.50 to ship and a 5 ounce package cost \$2.70 to ship.

- How much does it cost per ounce? \$0.10
- Can you figure out what the flat fee was? \$2.20

×

From Store A, the total cost to ship a 5-ounce package is \$4.25, and the total cost to ship a 6-ounce package is \$4.60. Store B charges a flat fee of \$1.50, plus \$0.50 per ounce to ship a package.

Which statement is true?

- A) The flat fee for shipping is \$0.15 more at Store B.
- B) The flat fee for shipping is \$1.00 more at Store A.
- The flat fee for shipping is \$1.15 more at Store B.
- The flat fee for shipping is \$2.00 more at Store A.

From Store A, the total cost to ship a 5-ounce package is \$4.25, and the total cost to ship a 6-ounce package is \$4.60. Store B charges a flat fee of \$1.50, plus \$0.50 per ounce to ship a package.

Which statement is true?

- The flat fee for shipping is \$0.15 more at Store B.
- B) The flat fee for shipping is \$1.00 more at Store A.
- The flat fee for shipping is \$1.15 more at Store B.
- The flat fee for shipping is \$2.00 more at Store A.

$$5 \text{ oz} = $4.25$$

$$6 \text{ oz} = $4.60$$

Find the difference: 1 oz is \$0.35

Subtract 35 cents 5 times: Flat fee for A is \$2.50



Jana wrote the ordered pairs (2, 2), (4, 3), and (10, 6). These ordered pairs satisfy a linear function.

Which ordered pair satisfies the **same** linear function?

- **A)** (12, 8)
- **B**) (14, 7)
- **C)** (20, 11)
- **D** (24, 16)

Think outside the box. There are MANY ways you can solve this problem!!!

## HOMEWORK: 30 Minutes of ALEKS

**Story Problems Worksheet is due TUESDAY.**