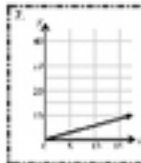
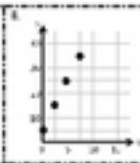


In exercises 1 – 30, decide if the functions are discrete or continuous.

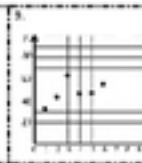
- | | |
|---|------------------------|
| 1. The number of times sunscreen is applied versus the amount of sunscreen used | Discrete or Continuous |
| 2. The time of day versus the distance a person is from home. | Discrete or Continuous |
| 3. The area of a room that is painted versus the amount of paint in the can. | Discrete or Continuous |
| 4. (photos taken, amount of storage/memory remaining) | Discrete or Continuous |
| 5. (shirts purchased, total cost of the shirts) | Discrete or Continuous |
| 6. (triangles drawn, total perimeter of the triangles) | Discrete or Continuous |



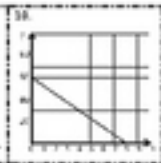
Discrete or Continuous



Discrete or Continuous



Discrete or Continuous



Discrete or Continuous

Real World Application:

11. The function $y = 346x + 30,000$ represents the total weight in pounds, y , of a concrete mixer truck that carries x cubic feet of concrete. The maximum weight of concrete that the truck can carry is 200 cubic feet.

Reasonable Domain:

Reasonable Range:

Will the truck weigh 65,000 pounds at any one time? Explain.

Is this a discrete or continuous function? Explain.

12. A math teacher is unpacking a box of calculators. The function $y = -1.46x + 15.68$ represents the number of pounds that a box weighs, y , as each calculator, x , is taken out of the box. The box weighs 15.68 pounds when full and 4 pounds when empty.

Reasonable Domain:

Reasonable Range:

How many calculators are in the box when it has not been unpacked yet?

Is this a discrete or continuous function? Explain.

