

Blizzard Bag Math II

Day 2

Name: _____ Date: _____ Block: 284

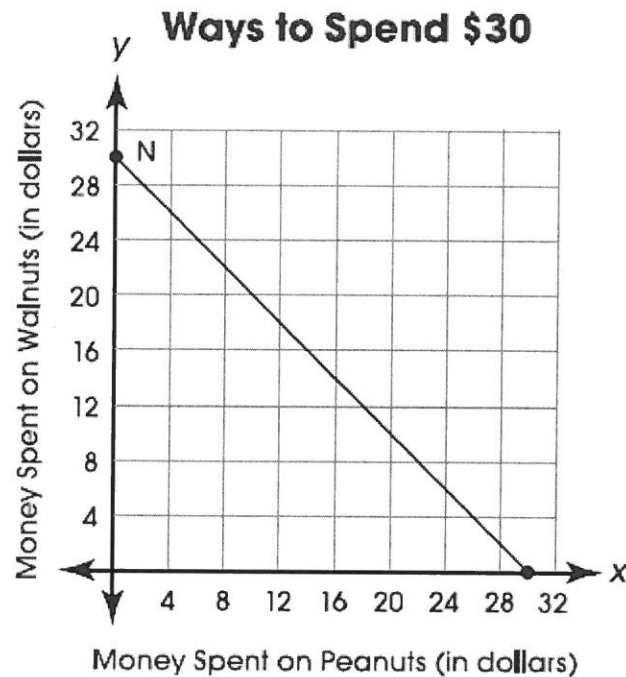
2. The first four rows of a number array are shown below.

Row 1				10
Row 2			20	30
Row 3		40	50	60
Row 4	70	80	90	100

What number will be at the far right end of row 7?

- A. 150
- B. 210
- C. 280
- D. 360

7. Jamie is buying peanuts and walnuts. He wants to spend exactly \$30. The graph below shows all possible ways that he can split the \$30 between the peanuts and the walnuts.



What does the point N on the graph represent?

- A. spending all \$30 on walnuts
- B. spending all \$30 on peanuts
- C. spending \$20 on peanuts and \$10 on walnuts
- D. spending half of the \$30 on peanuts and half of the \$30 on walnuts

18. Nancy decided to breed gerbils to sell to a pet store. She started with 2 gerbils and determined that they should quadruple in number every 4 months.

Nancy sold all of the gerbils to the pet store at the end of 1 year.

How many gerbils did Nancy sell to the pet store?

- A. 24 gerbils
- B. 66 gerbils
- C. 128 gerbils
- D. 512 gerbils

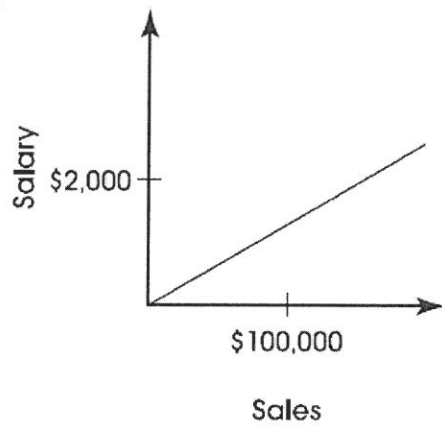
30. A construction company buys \$38,400 worth of new equipment, the value of which decreases linearly so that its value after 8 years is \$2,200. By what amount is the value of the equipment decreasing per year?

- A. \$ 275
- B. \$4,525
- C. \$4,800
- D. \$5,075

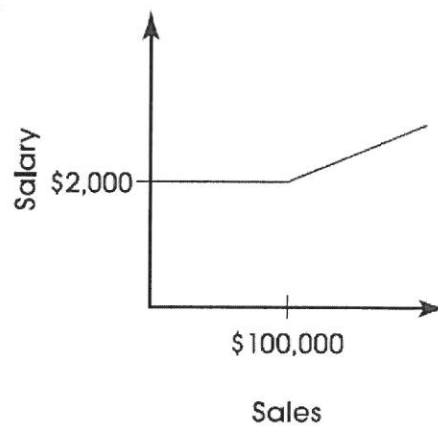
44. Jackie has a job selling cars. Her monthly salary is \$2,000 plus a commission of 1% of her total sales up to \$100,000 and 1.5% of additional sales above \$100,000.

Which graph represents this relationship?

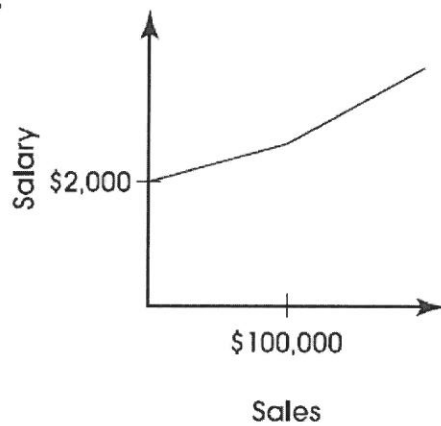
A.



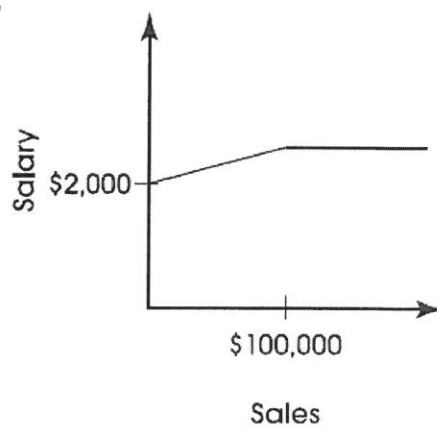
B.



C.



D.



2. On the number line point R represents the square root of a number.



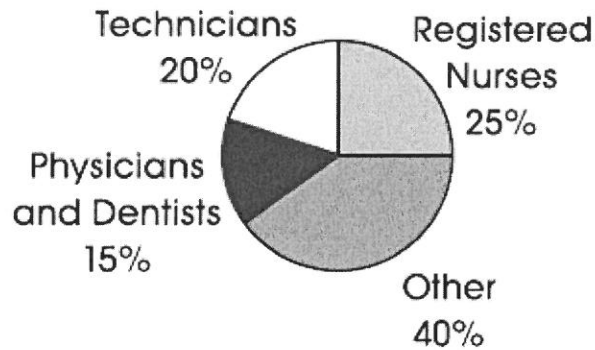
Which value could be the square of the number represented by point R?

- A. 137
 - B. 149
 - C. 165
 - D. 173
5. Carmella has a coupon that allows her to buy one pair of shorts at the regular price and get a second pair at half the regular price. The shorts cost \$25.50 per pair.

When Carmella arrives at the store, she finds that the shorts are on sale for 30% off the regular price. This sale does not allow coupons to be used on the discounted items.

In your **Answer Document**, explain whether two pairs of shorts would cost less by using the coupon or by buying two pairs of shorts at the sale price. Provide mathematical calculations and/or reasoning to support your answer.

14. Central Health Center employs 360 individuals. The graph shows the different types of positions at Central Health Center.



Approximately 48% of the physicians and dentists employed by Central Health Center are women. How many of the physicians and dentists are women?

- A. 26
 - B. 28
 - C. 36
 - D. 37
30. Which sequence of numerals is equivalent to:

$$\frac{2}{3}, 10\%, 0.8, 6?$$

- A. $\frac{4}{6}, \frac{1}{10}, \frac{8}{100}, 0.06$
- B. 0.67, 1.0, 8%, 6.00
- C. $66\frac{2}{3}\%, \frac{2}{20}, \frac{4}{5}, 6.0$
- D. $\frac{2}{3}, 0.01, 80\%, 6\%$

19. Earth has a surface area of 1.97×10^8 square miles. A new planet has a surface area 13 times the surface area of Earth.

What is the surface area of the new planet?

- A. 1.515×10^7 square miles
- B. 2.10×10^8 square miles
- C. 2.56×10^8 square miles
- D. 2.56×10^9 square miles