

Name: _____

Review Sheet Twenty

DIRECTIONS: Show all work.

1. Leanne collects data throughout the basketball season and uses these data to determine the probabilities of different teams playing in the league championship game. The probabilities for her four favorite teams playing in the championship game are shown below.

- Tigers: $P = \frac{2}{3}$
- Redbirds: $P = \frac{4}{5}$
- Bulldogs: $P = \frac{3}{8}$
- Titans: $P = \frac{1}{2}$

Which of these teams is **least likely** to play in the championship game?

- A. Tigers
- B. Redbirds
- ☒ C. Bulldogs
- D. Titans

2. Jeanette purchased a concert ticket on a web site. The original price of the ticket was \$75. She used a coupon code to receive a 20% discount. The web site applied a 10% service fee to the discounted price. Jeanette's ticket was less than the original price by what percent?

- A. 7%
- B. 10%
- ☒ C. 12%
- D. 28%

$$\begin{aligned} 100\% &= 75 \\ 19\% &= .75 \\ 80\% &= 60 \end{aligned}$$

$$\begin{aligned} 100\% &= 60 \\ 19\% &= .6 \\ 10\% &= 6 \end{aligned}$$

$$\begin{aligned} 100\% &= 75 \\ 19\% &= .75 \\ 88\% &= 66 \end{aligned}$$

$$60 + 6 = 66$$

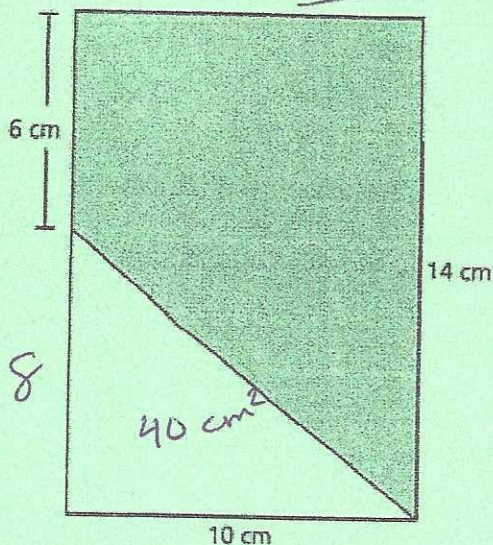
$$100 - 88$$

3. The amount of money in a bank account increased by 21.5% over the last year. If the amount of money at the beginning of the year is represented by n , which expression represents the amount of money in the bank account after the increase?

- ☒ A. $n + 0.215n$
- B. $n + 21.5n$
- C. $0.215n$
- D. $21.5n$

$$n + .215n$$

4. What is the area, in square centimeters, of the shaded part of the rectangle shown below?



- A. 20
B. 60
C. 100
D. 140

$$14(10) = 140$$

$$A = \frac{1}{2}bh$$

$$= \frac{1}{2}(10)(8)$$

$$= 40$$

$$140 - 40 = 100$$

5. It is recommended that one fire extinguisher be available for every 6,000 square feet in a building. Write and solve an equation to determine x , the number of fire extinguishers needed for a building that has 135,000 square feet.

$$\frac{6000x}{6000} = \frac{135000}{6000}$$

$$x = 22.5$$

23 fire ext.