

Problems Of the Week

Solve each of the following problems. Be sure to do your best work.

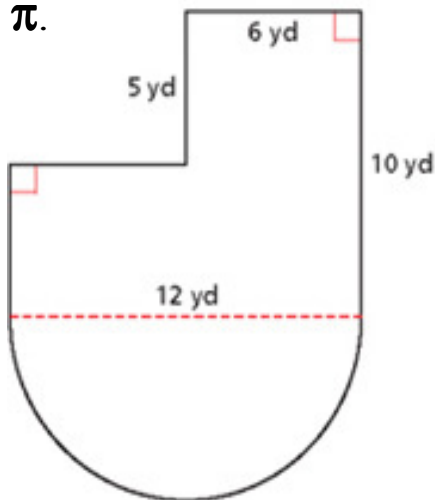
- 1) Each card in a set of 12 cards is marked with the letter A or B. When you choose a card at random, the probability of choosing a card marked A is $\frac{2}{3}$. How many cards are marked A?

- [A] 4
- [B] 6
- [C] 8
- [D] 9

- 2) A triangle has two angles that each measure 21° . What is the measure of the third angle of the triangle?

- [A] 21°
- [B] 42°
- [C] 48°
- [D] 136°

- 3) What is the area of this figure? Use 3.14 for π .



- [A] 127.68 yds^2
- [B] 146.52 yds^2
- [C] 542.16 yds^2
- [D] $1,125 \text{ yds}^2$

- 4) Circle A has a radius of 1.74 centimeters. Circle B has a radius that is twice as long as circle A's. What is the diameter of circle B?

- [A] 0.87 cm
- [B] 3.48 cm
- [C] 6.96 cm
- [D] 13.92 cm

- 5) Which equation describes the function in the table?

x	1	2	3	4
y	4	9	14	19

- [A] $y = x + 3$
- [B] $y = 4x$
- [C] $y = 3x + 1$
- [D] $y = 5x - 1$

- 6) Which answer choice correctly shows $8\frac{3}{7}$ as an improper fraction?

- [A] $\frac{58}{56}$
- [B] $\frac{18}{7}$
- [C] $\frac{49}{7}$
- [D] $\frac{59}{7}$

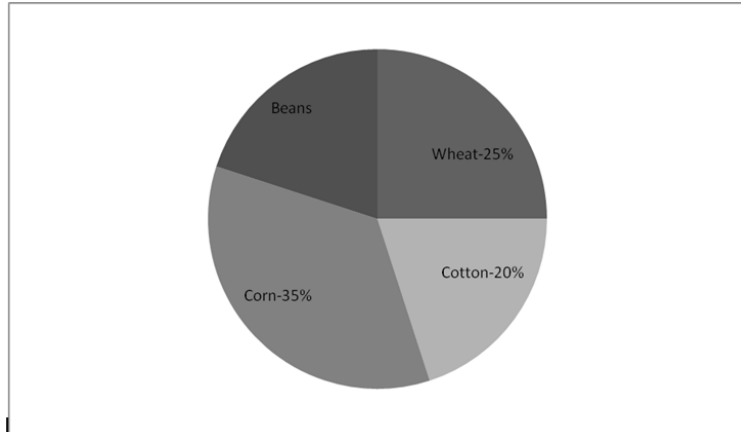
- 7) What is 724% written as a decimal?

- [A] 0.724
- [B] 724
- [C] 72.4
- [D] 7.24

Problems Of the Week

Mr. Riley grows four different crops on his 300-acre farm. Each acre has the same number of plants. The circle graph below shows what percent of the total number of acres is planted in each group.

Crops planted on Mr. Riley's Farm



A. What percent of Mr. Riley's farm is planted in beans? Show your work.

B. How many acres of wheat are planted in Mr. Riley's farm? Show or explain your work.

C. Mr. Riley thinks that if he plants wheat in all of the acres that are beans, more than half his farm would be wheat. Is he correct? Why or why not? Show and explain your work.