

# Praxis Review – Form 1

#31

Answer the question by clicking on the correct response.

A cash drawer contains a total of \$1,240 in five-dollar bills and twenty-dollar bills. If the drawer contains 8 more five-dollar bills than twenty-dollar bills, which of the following systems of equations can be used to determine the number of five-dollar bills and the number of twenty-dollar bills in the drawer?

$5x + 20y = 1,240$   
 $x + y = 8$

$5x + 20y = 1,240$   
 $8x = y$

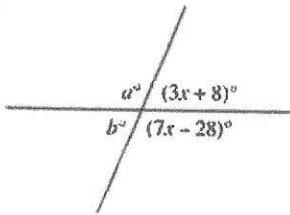
$5x + 20y = 1,240$   
 $8y = x$

$5x + 20y = 1,240$   
 $x - y = 8$

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Answer the question by clicking on the correct response.



In the figure above, two lines intersect to form four angles. What is the value of  $a$  ?

- 98
- 105
- 107
- 112

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Click on a choice and drag it to a box.

Order the scenarios below from the scenario with the least possible number of outcomes to the scenario with the greatest possible number of outcomes.

*The number of different orders in which 5 people can finish a race if they each complete the race in a different amount of time*

*The number of ways in which 2 different prizes can be awarded among 9 people if no one person can receive both prizes*

*The number of different committees of 3 people that can be formed from a group of 7 people*

Least Number of Outcomes

Greatest Number of Outcomes

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Answer the question by clicking on the correct response.

The quadratic equation  $x^2 - 10x - 24 = 0$  can be written as  $(x - a)(x + b) = 0$ , where  $a$  and  $b$  are positive integers. What is the value of  $a + b$ ?

- 10
- 11
- 14
- 24

# Praxis Review – Form 1

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Click on each box and type in a number. Backspace to erase.

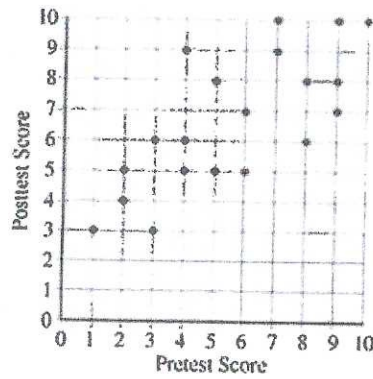
At a car dealership, the ratio of sedans to sport utility vehicles is 16 to 7, and the ratio of sport utility vehicles to hatchbacks is 4 to 3. What is the ratio of sedans to hatchbacks?

Give your answer as a fraction.


# Praxis Review – Form 1

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Answer the question by clicking on the correct response.



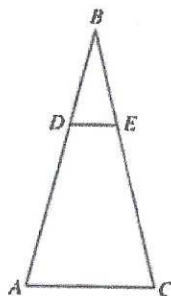
The scatterplot above shows the pretest and posttest scores for each of 20 students. What percent of the students do not have a posttest score greater than their pretest score?

- 20%
- 30%
- 40%
- 50%

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Click on the answer box and type in a number. Backspace to erase.



In the triangle shown,  $DB = 25$ ,  $DE = 12$ ,  $AC = 33$ , and  $\overline{AC}$  is parallel to  $\overline{DE}$ . What is the length of  $\overline{AD}$ ?

AD =

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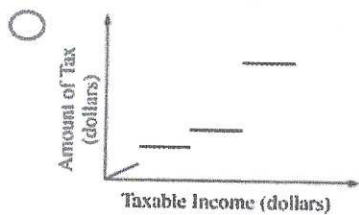
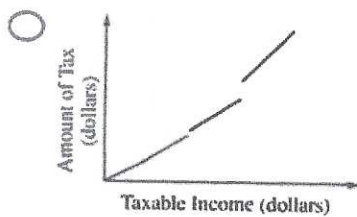
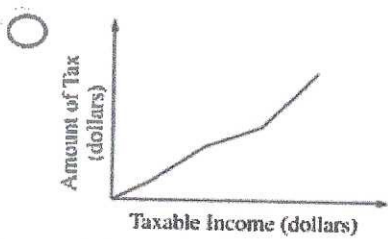
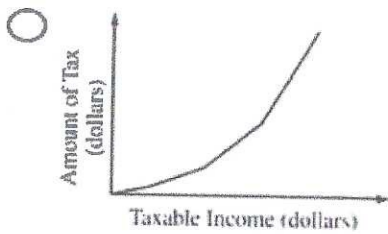
Answer the question by clicking on the correct response.

PARTIAL INCOME TAX SCHEDULE FOR SINGLE INDIVIDUALS

If taxable income is over	But not over	The amount of tax is
\$0	\$8,000	10% of the amount over \$0
\$8,000	\$30,000	\$800 plus 15% of the amount over \$8,000
\$30,000	\$70,000	\$4,100 plus 25% of the amount over \$30,000
\$70,000	\$150,000	\$14,100 plus 28% of the amount over \$70,000

The table above shows the income tax schedule for single individuals for a certain year. Which of the following graphs would best represent this tax schedule?

Note: Graphs not drawn to scale.





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**Click on each box and type in a number. Backspace to erase.**

In a classroom, there are 11 boys and 13 girls. Two different students will be selected at random to compete in a contest. What is the probability that both of the students selected will be girls?

Give your answer as a fraction.

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# Praxis Review – Form 1

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time remaining - 0.

Answer the question by clicking on the correct response.

$$p = 3(w + 5) + 7$$

If the value of  $w$  in the equation above is increased by 1, how will the value of  $p$  change?

- It will increase by 1.
- It will increase by 3.
- It will increase by 5.
- It will increase by 7.

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Click on your choices.

For every 50 box tops from specially marked products a homeroom collects, a star is placed on a poster in the principal's office at Jason High School. Let  $s$  represent the number of stars on the poster,  $n$  represent the number of box tops collected, and  $r$  represent the number of box tops that have not been used to earn a star. Which equations represent the relationship among  $n$ ,  $r$ , and  $s$ ?

Select all that apply.

Select all that apply.

$s = \frac{n}{50} + r$

$n = 50s + r$

$r = \frac{n}{50} - s$

$s = \frac{n-r}{50}$

$50 = \frac{n}{s} - r$

$r = 50s - n$

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**Answer the question by clicking on the correct response.**

A fruit shipment contains 215 damaged pieces of fruit. If 20 percent of the entire shipment was damaged, how many pieces of fruit were in the shipment?

- 1,075
- 1,612
- 2,150
- 4,300

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Time remaining = 0:49:22

Click on each box and type in a number. Backspace to erase.

The lengths of the edges of cube  $A$  are 2.5 times the lengths of the edges of cube  $B$ . The surface area and volume of cube  $A$  are how many times the surface area and volume of cube  $B$ , respectively?

The surface area of cube  $A$  is  times the surface area of cube  $B$ .

The volume of cube  $A$  is  times the volume of cube  $B$ .

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Answer the question by clicking on the correct response.

3, 3, 6, 9, 15, 24, ...

The first two terms in the sequence above are 3. Each term after the first two is equal to the sum of the two preceding terms. How much greater is the tenth term of the sequence than the seventh term of the sequence?

- 39
- 63
- 102
- 126

# Praxis Review – Form 1

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Time remaining = 0:47:21

Answer the question by clicking on the correct response.

For which of the following is it true that  $y$  is a function of  $x$ , but  $x$  is not a function of  $y$ ?

- The number of bacteria grown in a lab doubles every 5 hours, where  $x$  is time, in hours, and  $y$  is the number of bacteria grown in the lab.
- Oliver deposits \$3,000 into a savings account that earns 8 percent interest compounded continuously and makes no withdrawals or other deposits from the savings account, where  $x$  is the number of weeks since the initial deposit and  $y$  is the number of dollars in his savings account.
- Ilana pays the phone company the fixed amount of \$50 each month to make an unlimited number of phone calls, where  $x$  is the number of phone calls and  $y$  is the amount she pays the phone company each month.
- The area of a square depends on the length of a side of the square, where  $x$  is the length of a side of the square and  $y$  is the area of the square.