Question ID 73f17756

Assessment	Test	Domain	Skill	Difficulty
PSAT 8/9	Math	Problem-Solving and Data Analysis	Ratios, rates, proportional relationships, and units	Medium

ID: 73f17756

How many yards are equivalent to 77 rods? $(5.5 \text{ yards} = 1 \text{ rod})$

Question ID 3fbb76c7

Assessment	Test	Domain	Skill	Difficulty
PSAT 8/9	Math	Problem-Solving and Data Analysis	Ratios, rates, proportional relationships, and units	Medium

ID: 3fbb76c7

The ratio of the length of line segment XY to the length of line segment ZV is 6 to 1. If the length of line segment XY is 102 inches, what is the length, in inches, of line segment ZV?

A. 17

B. 96

C. 102

D. 612

Question ID 4bf5a03e

Assessment	Test	Domain	Skill	Difficulty
PSAT 8/9	Math	Problem-Solving and Data Analysis	Ratios, rates, proportional relationships, and units	Medium

ID: 4bf5a03e

A fish swam a distance of $5{,}104$ yards. How far did the fish swim, in miles? $(1 \text{ mile} = 1{,}760 \text{ yards})$

A. 0.3

B. 2.9

C. $3{,}344$

D. $6{,}864$

Question ID be37047b

Assessment	Test	Domain	Skill	Difficulty
PSAT 8/9	Math	Problem-Solving and Data Analysis	Ratios, rates, proportional relationships, and units	Medium

ID: be37047b

A giant armadillo has a mass of 39 kilograms. What is the giant armadillo's mass in **grams**?
$(1 \text{ kilogram} = 1{,}000 \text{ grams})$

Question ID 72de59a3

Assessment	Test	Domain	Skill	Difficulty
PSAT 8/9	Math	Problem-Solving and Data Analysis	Ratios, rates, proportional relationships, and units	Medium

ID: 72de59a3

A special camera is used for underwater ocean research. When the camera is at a depth of 58 fathoms, what is the camera's depth in feet? $(1 \text{ fathom} = 6 \text{ feet})$

Question ID 4b772c54

Assessment	Test	Domain	Skill	Difficulty
PSAT 8/9	Math	Problem-Solving and Data Analysis	Ratios, rates, proportional relationships, and units	Medium

ID: 4b772c54

An object travels at a constant speed of 6 centimeters per second. At this speed, what is the time, in seconds, that it would take for the object to travel 24 centimeters?

Question ID 0ce6ee92

Assessment	Test	Domain	Skill	Difficulty
PSAT 8/9	Math	Problem-Solving and Data Analysis	Ratios, rates, proportional relationships, and units	Medium

ID: 0ce6ee92

The ratio x to y is equivalent to the ratio 12 to t. When $x = 156$, what is the value of y in terms of t?

A. $13t$

B. $12t$

C. $144t$

D. $168t$

Question ID c4714d19

Assessment	Test	Domain	Skill	Difficulty
PSAT 8/9	Math	Problem-Solving and Data Analysis	Ratios, rates, proportional relationships, and units	Medium

ID: c4714d19

A cherry pitting machine pits 12 pounds of cherries in 3 minutes. At this rate, how many minutes does it take the machine to pit 96 pounds of cherries?

A. 8

B. 15

C. 24

D. 36

Question ID bf46227e

Assessment	Test	Domain	Skill	Difficulty
PSAT 8/9	Math	Problem-Solving and Data Analysis	Ratios, rates, proportional relationships, and units	Medium

ID: bf46227e

How many feet are equivalent to 34 yards? $(1\ \text{yard} = 3\ \text{feet})$

Question ID eab1acc0

Assessment	Test	Domain	Skill	Difficulty
PSAT 8/9	Math	Problem-Solving and Data Analysis	Ratios, rates, proportional relationships, and units	Medium

ID: eab1acc0

The number of raccoons in a 131-square-mile area is estimated to be $2{,}358$. What is the estimated population density, in raccoons per square mile, of this area?

A. 18

B. 131

C. 149

D. $2{,}376$

Question ID 28abaf2d

Assessment	Test	Domain	Skill	Difficulty
PSAT 8/9	Math	Problem-Solving and Data Analysis	Ratios, rates, proportional relationships, and units	Medium

ID: 28abaf2d

A participant in a bicycle race completes the race with an average speed of $24{,}816$ yards per hour. What is this average speed, in miles per hour? $(1 \text{ mile} = 1{,}760 \text{ yards})$

Question ID 42d0621f

Assessment	Test	Domain	Skill	Difficulty
PSAT 8/9	Math	Problem-Solving and Data Analysis	Ratios, rates, proportional relationships, and units	Medium

ID: 42d0621f

A special camera is used for underwater ocean research. The camera is at a depth of 39 fathoms. What is the camera's depth in feet? $(1 \text{ fathom} = 6 \text{ feet})$

A. 234

B. 117

C. 45

D. 7

Question ID e0ec5e9b

Assessment	Test	Domain	Skill	Difficulty
PSAT 8/9	Math	Problem-Solving and Data Analysis	Ratios, rates, proportional relationships, and units	Medium

ID: e0ec5e9b

A certain bird species can fly at an average speed of 16 meters per second when in continuous flight. At this rate, how many meters would this bird species fly in 4 seconds?

A. 64

B. 20

C. 16

D. 12

Question ID 0147070d

Assessment	Test	Domain	Skill	Difficulty
PSAT 8/9	Math	Problem-Solving and Data Analysis	Ratios, rates, proportional relationships, and units	Medium

ID: 0147070d

A printer produces posters at a constant rate of 42 posters per minute. At what rate, in posters per hour, does the printer produce the posters?

Question ID 261eeb93

Assessment	Test	Domain	Skill	Difficulty
PSAT 8/9	Math	Problem-Solving and Data Analysis	Ratios, rates, proportional relationships, and units	Medium

ID: 261eeb93

Tilly earns p dollars for every w hours of work. Which expression represents the amount of money, in dollars, Tilly earns for $39w$ hours of work?

A. $39p$

B. $\frac{p}{39}$

C. $p + 39$

D. $p - 39$

Question ID c2ac2720

Assessment	Test	Domain	Skill	Difficulty
PSAT 8/9	Math	Problem-Solving and Data Analysis	Ratios, rates, proportional relationships, and units	Medium

ID: c2ac2720

An object travels at a constant speed of 12 centimeters per second. At this speed, what is the time, in seconds, that it would take for the object to travel 108 centimeters?

A. 9

B. 96

C. 120

D. 972