

The amount in dollars a driver earns each month is determined by the equation $A = 0.25m + 500$, where m is the number of miles the driver drives that month.

What do you notice?

What do you wonder?

- 18.** The amount in dollars a driver earns each month is determined by the equation $A = 0.25m + 500$, where m is the number of miles the driver drives that month.

Which statement is true about the driver's earnings?

- A.** The driver earns \$500.25 each month.
- B.** The driver earns \$500 for each mile driven plus \$0.25.
- C.** For each 100 miles driven during the month, the driver earns \$525.
- D.** The driver earns \$0.25 for each mile driven plus a base salary of \$500.

Pair/Share:

How familiar are you with the math topics on the TASC?
Which topics have you taught?

Takeaways on the TASC

NYSED Teacher Leader Institute
November 2016

Information about the TASC Mathematics Test (GHI)

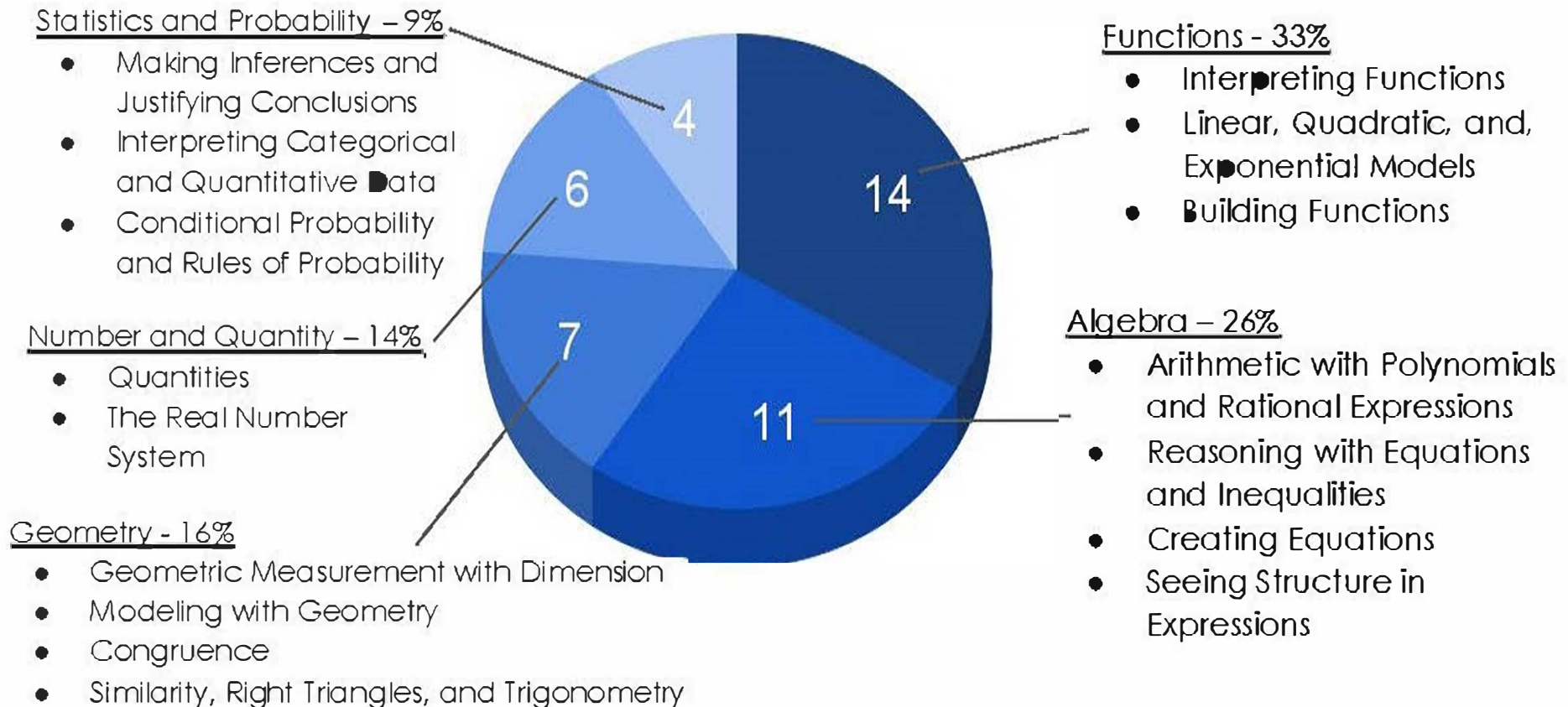
- ❖ TASC Math Item Specifications
- ❖ TASC Math Blueprint

Domain/ Reporting Category	Subdomain/Core Idea	Subdomain %	Domain %
Algebra	Arithmetic with Polynomials and Rational Expressions	6%	26%
	Reasoning with Equations and Inequalities	8%	
	Creating Equations	6%	
	Seeing Structure in Expressions	6%	
Geometry	Geometric Measurement with Dimension	6%	23%
	Modeling with Geometry	7%	
	Congruence	5%	
	Similarity, Right Triangles, and Trigonometry	5%	
Functions	Interpreting Functions	10%	26%
	Linear, Quadratic, and Exponential Models	8%	
	Building Functions	8%	
Number and Quantity	Quantities	10%	13%
	The Real Number System	3%	
Statistics and Probability	Making Inferences and Justifying Conclusions	3%	12%
	Interpreting Categorical and Quantitative Data	6%	
	Conditional Probability and Rules of Probability	3%	

- ❖ TASC Official Readiness Assessments 4 and 5

Analyzing TASC ORT Math Assessments 4 & 5

(Out of 42 unique questions)



The population of a certain strain of bacteria can be modeled by the function $B(t) = (1.05)^t$, where $B(t)$ is the population and t is the time in weeks.

What is the percent change in the population, and does this represent exponential growth or decay?

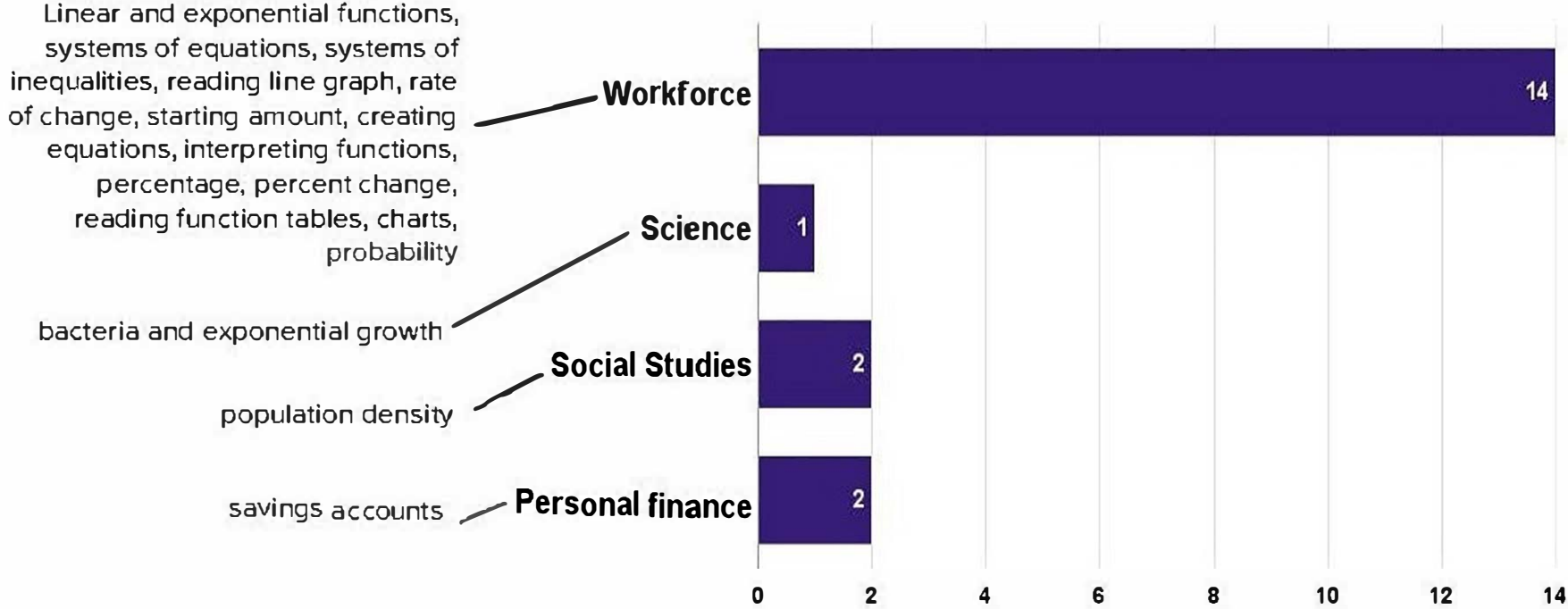
- A. 5%; exponential decay
- B. 5%; exponential growth
- C. 105%; exponential decay
- D. 105%; exponential growth

A salesperson earns a salary of \$250 per week plus an 8% commission on everything the salesperson sells.

Which equation represents the weekly earnings, E , of the salesperson for d dollars in sales?

- A. $E = 8d + 250$
- B. $E = 0.8d + 250$
- C. $E = 250d + 0.08$
- D. $E = 0.08d + 250$

More than 45% of math questions on TASC 4 & 5 have context

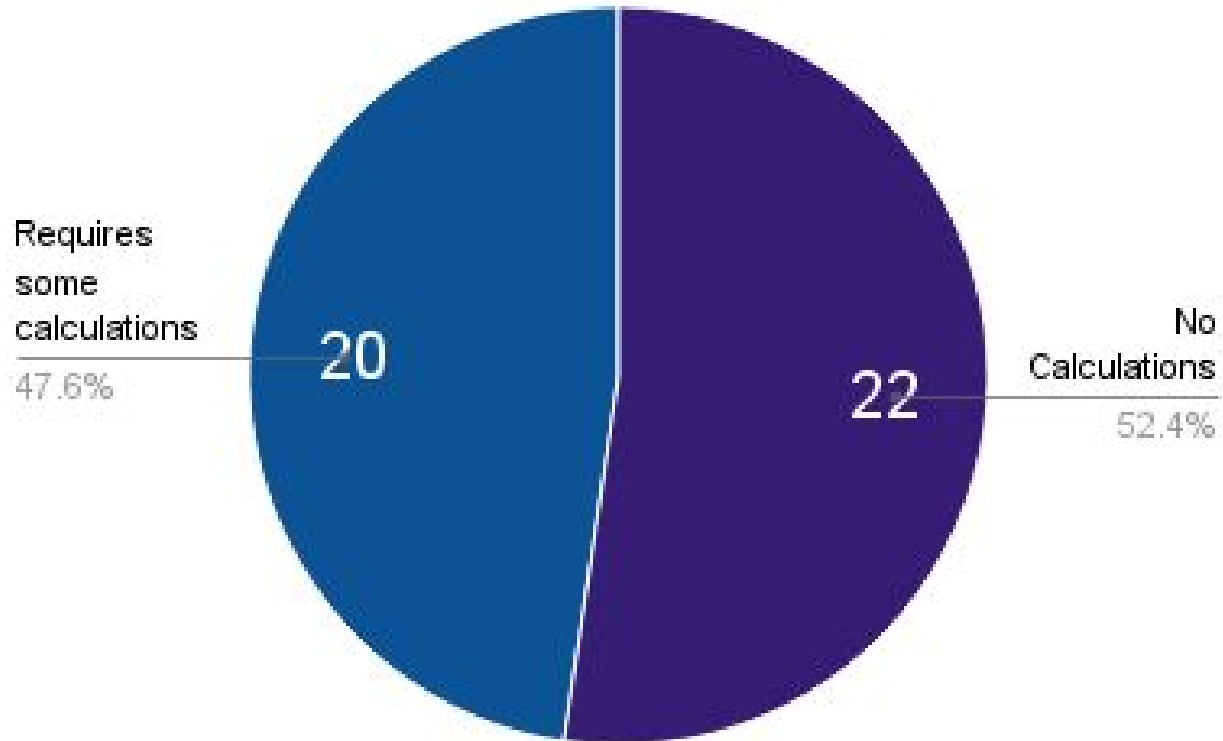


Math in Other Content Areas

Topics: Line graphs, line of best fit, charts, interpreting data, using formula, pie charts, pictograph, equilibrium price graph



No Calculations Necessary



Sample Question Stems from ORT 4/5

- What type of function should be used... and why?
- Which linear function models the relationship between...?
- Which equation represents...?
- Which graph represents...?
- Which system of equations can be used to...?
- Which system of inequalities can...?
- What is another way to write...?
- Which statement is true about...?
- What is the correct interpretation of... ?
- Which interpretation of this... is correct?
- Which statement is correct?
- Which statement about the... is true?

What do you notice? What do you wonder?

Equations from TASC ORT 4 & 5

What do you notice? What do you wonder?

- $P = R - C$
- $p(t) = -t^2 + 2t - 2$
- $E = 0.08d + 250$
- $p(x) = 2^x$
- $q(x) = x^2$
- $f(x) = 250x + 6000$
- $A = 1.25x + 9.50$
- $x - 2y = 10$
- $3x + 4y = -40$
- $C = 10b + 25$
- $f(x) = \frac{x+3}{x-7}$
- $B(t) = (1.05)^t$
- $P(t) = 12.5t + 35$
- $J + 5 = A$
- $J + A = 59$
- $y = -44x + 1,000$
- $r + b < 200$
- $b < \frac{1}{2}r$
- $y = -2x^2 + 9$
- $y = 4x + 3$
- $A = 0.25m + 500$
- $f(x) = x^3 + x^2 - 2x$
- $y \leq \frac{1}{2}x - 1$