Task	Level
SOL 8.3b Two bottles of the exact same brand of body wash are side by side on a shelf for the same price. The only difference is with the size of the bottles. The smaller bottle contains 12 ounces and the larger bottle contains more than 12 ounces. Lisa purchases the larger bottle with a sticker on it that says "50% more for the 12 ounce price." How many ounces does the larger bottle contain? Write an explanation justifying your answer.	High

Task	Level
SOL 8.3b A class enrollment increases from 12 students to 18 students. What is the percent increase in enrollment?	Low

Task	Level
SOL 8.7 (a) Your job is to design plastic containers for ice cream sprinkles. Design and sketch containers in the shape of a right triangular prism, a rectangular prism, and a right circular cylinder. Each must fit on a shelf space that is 12 cm tall, 6 cm wide and 6 cm deep. Sketch each and label with dimensions. Explain which container will hold the most sprinkles for the given shelf space. Which container design would save money by using less plastic? Explain your reasoning.	High

Task	Level
SOL 8.7 (a) Design a right triangular prism and a cube that each holds exactly 64 cubic units. Sketch both and label dimensions. Explain how you know both containers hold exactly 64 cubic units.	High

Task	Level
	Low/Medium
SOL 8.7a The volume of a square-based pyramid is 588 cubic inches. The height of this pyramid is 9 inches. What is the area of the base of this pyramid? *Adapted from EPAT practice items, VDOE, Grade 8, 2010*	

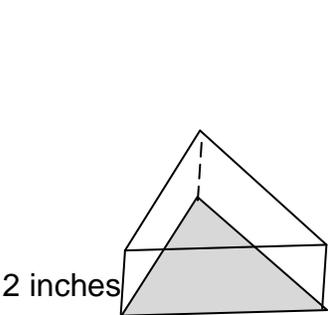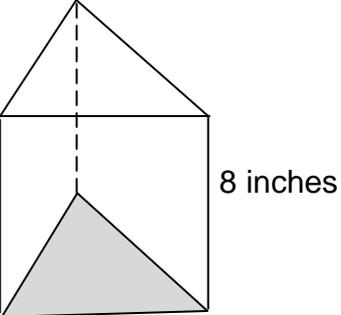| Task	Level
	Medium
SOL 8.15a What value of p makes this equation true? $$2p = \frac{-3p - 6}{4}$$ *From EPAT practice items, VDOE, Grade 8, 2010*	

Task	Level
SOL 8.15b Graph the solution to this inequality on a number line. $-3a + \frac{1}{2} \le 8$ *Adapted from EPAT practice items, VDOE, Grade 8, 2010*	Medium

Task	Level
SOL 8.15a and c Solve the following equation. Identify the property used in each step of your solution. $\frac{2}{5}x + 5 = 9$	Medium

Task	Level
SOL 8.3b Rhea had a score of a 70 on her first quiz and a score of 77 on her second quiz. What is the percent increase from her first quiz score to her second quiz score? *From EPAT practice items, VDOE, Grade 8, 2010*	Low

Task	Level
SOL 8.11 A rectangle as shown has a length of 0.9 centimeters and a width of 0.4 centimeters. A circle is drawn inside that touches the rectangle at two points. 0.9 cm 0.4 cm What is the total area of the unshaded region in the rectangle? *From EPAT practice items, VDOE, Grade 8, 2010*	Medium

Task	Level
SOL 8.7a A triangular prism is shown. B h $V = Bh$ $S.A. = hp + 2B$ 5 cm 2 cm 3 cm 4 cm What is the total surface area of this prism? *From EPAT practice items, VDOE, Grade 8, 2010*	Medium

Task	Level
SOL 8.7b Two triangular prisms shown have bases with the same area. 2 inches **Prism M** **Prism N** 8 inches The volume of Prism N can be found by multiplying the volume of Prism M by what scale factor? Select one of the answers below. 4 8 1/4 3 6 1/6 *From EPAT practice items, VDOE, Grade 8, 2010*	Medium

Task	Level
SOL 8.12 A deck contains these cards of the same size and shape. • 5 green cards • 4 red cards • 2 orange cards • 1 blue card Len will randomly select one card from the deck, not replace it, and then randomly select a second card. What is the probability he will select a blue card and then a red card? Write your answer in simplest form. *From EPAT practice items, VDOE, Grade 8, 2010*	Medium

Task	Level

SOL 8.17
 	
Three rectangular prisms have the same base area but different heights. As the heights of these prisms increases, the volume increases. Identify the dependent and independent variables in this situation.
 	
Select your answers from the following to complete the sentences.
 	
     • height of the prism
     • volume of the prism
     • length of the base
     • width of the base
     • area of the base
 	
The dependent variable is _____.
 	
The independent variable is _____.
 	
From EPAT practice items, VDOE, Grade 8, 2010
	Low

Task	Level
SOL 8.2c Which are not included in the set of natural numbers? $-\dfrac{2}{5}, \ \dfrac{3}{10}, \ 15.4, \ 41$	Low

Task	Level
SOL 8.4 What is the value of $2x^2 + 5(x^3 - 4)$ when $x = 3$?	Medium

Task	Level
SOL 8.5b The irrational number $\sqrt{66}$ lies between which two consecutive whole numbers?	Low