

**GRADE 12 ESSENTIAL
UNIT A – PROBLEM SOLVE
SOLVE A SIMPLER PROBLEM**

Name: _____

Date: _____

WHERE WILL YOU FIND THE CENTRE OF GRAVITY?

For each **original problem**, there is a **simpler problem**. Solve the simpler problem. Then choose the correct method for solving the original problem. Write the letter of the correct choice in the box at right containing the answer to the simpler problem.

100	300	12	25	30	8	40	10
					E		

Read carefully ↗

Original Problem	Simpler Problem	Method to Solve Original Problem
<p>Jelly Junior High ordered 12 computers and 4 video recorders. The computers sell for \$979 each, but the school got a discount and paid only \$851 each. Each video recorder cost \$259. How much did the school pay for the computers?</p> <p style="color: red; font-size: 1.2em;">The 979 is irrelevant UFI</p>	<p>The school bought 3 computers and paid \$100 for each. How much was paid for the computers?</p> <p style="text-align: right;">\$ _____</p>	<p><input type="radio"/> L 979-851</p> <p><input type="radio"/> T 12x851</p>
<p>The fastest speed at which humans have traveled is 24,791 miles per hour when the Apollo 10 reached its maximum speed 400,000 feet above the earth. At this speed, how long would it take to travel to the moon, a distance of 233,812 miles?</p> <p style="color: blue; font-size: 1.2em;">Notice the useless number like 400,000 has nothing to do with problem</p>	<p>How long would it take a person traveling 10 miles per hour to travel 80 miles?</p> <p style="color: blue; font-size: 1.2em;"> $10 \text{ mi/hr} = 80 \text{ mi/x hr}$ $x = \frac{80 \text{ mi} \cdot 1 \text{ hr}}{10 \text{ mi}} = 8 \text{ hr}$ </p> <p style="text-align: right;">_____ h</p>	<p><input type="radio"/> O 400,000 - 233,812</p> <p><input checked="" type="radio"/> E 233,812 ÷ 24,791</p>

Speed = miles/hrs

$$10 = 80/x$$

$$x = 80 \div 10 = 8$$

Gr12Ess_A_SolveSimpler.docx

COMPLETE THE PUZZLE! That is how you know if you got the correct answers!

<p>A team of 8 horses pulled a stagecoach toward Dodge City in 1869. It carried 3 strongboxes, each with \$4,750 in gold coins. The stagecoach was attacked by 4 outlaws who stole \$10,392. What was the value of the gold left on the stagecoach?</p>	<p>A stagecoach carried 3 boxes, each holding \$100. Outlaws stole \$200. How much was left?</p> <p style="text-align: right;">\$ _____</p>	<p>(A) $(3 \times 4,750) - 10,392$ (S) $(4 \times 10,392) - 4,750$</p>
<p>When Rolex Glomgold died at the age of 78, his estate was worth \$916,694. His will directed that \$134,250 be split between 2 charities and the rest divided equally among his 29 grandchildren. How much did each grandchild receive?</p>	<p>Rolex died and left \$100. \$10 went to charity. The rest was divided equally among 3 people. How much did each receive?</p> <p style="text-align: right;">\$ _____</p>	<p>(N) $2 \times 134,250 \times 29$ (H) $\frac{916,694 - 134,250}{29}$</p>
<p>Mr. Pumpnickel's 1989 Buick gets 27 miles per gallon when traveling at 50 miles an hour. At this rate, how much gasoline is needed to travel from Miami to Dallas, a distance of 1,338 miles, and then back again to Miami?</p>	<p>A car gets 20 miles per gallon. How much gas is needed to travel 100 miles and back again?</p> <p style="text-align: right;">_____ gal</p>	<p>(R) $50 \times 27 \times 1,388$ (V) $\frac{2 \times 1,388}{27}$</p>
<p>Chad works 13 hours a week after school. He earns \$4.85 an hour. He also spends 7 hours a week practicing the violin. He saved all his earnings for 6 weeks and bought a new violin for \$347. How much money did he have left?</p>	<p>Chad works 10 hours a week and earns \$5 an hour. He saved his earnings for 2 weeks and then spent \$75. How much did he have left?</p> <p style="text-align: right;">\$ _____</p>	<p>(T) $(13 \times 4.85 \times 6) - 347$ (C) $(6 \times 7 \times 4.85) - 347$</p>

100	300	12	25	30	8	40	10
A	T		T	H	E		V

"UFI" = useless friggin information

COMPLETE THE PUZZLE! That is how you know if you got the correct answers!