## Assessment Test for Singapore Primary Mathematics 6A U.S. Edition

This test covers only material taught in Primary Mathematics 6A, U.S. Edition (http://www.singaporemath.com/)

1. Simplify the following:
(a) 20a $+14-8 a-7$
(b) $b+6 b-2 b$
2. Find the value of the expression when n is 8 .
(a) $150-2 n^{2}$
(b) $\frac{5 n-7}{3}$
3. The average price of 3 shirts is $\$ 12$. One of the shirts costs $\$ p$ and a second shirt costs $\$ 10$.
(a) Express the price of the third shirt in terms of $p$ in the simplest form.
(b) What is the price of the third shirt if $p$ is 13.50 ?
4. Amy is $x$ years old. Betty is 4 times as old as Amy. Carla is 3 years older than Betty.
(a) Express Carla's age in years in terms of x .
(b) If Amy is 2 years old, how old, in years, is Carla?
5. Mrs. Wilson bought 4 bags of rice. She gave the cashier $\$ 50$ and received $\$ \mathrm{y}$ change.
(a) Express the cost of one bag of rice in terms of $y$.
(b) If $\mathrm{y}=18.60$, what is the cost of one bag of rice?
6. $\frac{1}{2}$ of Andy's money is $\frac{3}{5}$ of Bob's money.
(a) Express Andy's money as a fraction of Bob's money.
(b) If Andy has $\$ 15$ more than Bob, how much money do they have altogether?
7. Mrs. Johnson mixed meat with potatoes in the ratio of 5:3 to make 4 kg of meat loaf. How much meat did she use? Give your answer in kilograms and grams.
8. The ratio of Zoe's money to Yolanda's is 3: 7. Yolanda has $\$ 64$ more than Zoe. [4] If Yolanda gives $\frac{1}{4}$ of her money to Zoe, what will be the new ratio of Zoe's money to Yolanda's?
9. Mr. Olson had 16 L of paint. He used 3 L 250 ml to paint one wall and $80 \%$ of the remainder to paint another wall. How much paint did he have left?
10. A fuel tank of a car is $80 \%$ full. After traveling some distance, only $30 \%$ of that fuel is left. The tank is then filled to its full capacity by putting in 19 gallons. What is the full capacity of the tank?
11. 4,860 people visited a fair on Saturday. This was $20 \%$ more than the number of [4] visitors on Friday. How many visitors were there on Friday?
12. $30 \%$ of the beads in a jar are red. The rest are blue. If there are 500 more blue beads than red, how many beads are there altogether?
13. A cyclist took 3 h to cycle from Town X to Town Y . His average speed was 12 $\mathrm{km} / \mathrm{h}$. If his average speed were increased by $3 \mathrm{~km} / \mathrm{h}$, how much time would he then take for the journey? Give your answer in hours and minutes.
14. A motorist traveled from Town A to Town B. After traveling $\frac{1}{3}$ of the distance for the journey at an average speed of $45 \mathrm{~km} / \mathrm{h}$, he continued to travel another 480 km to reach Town B. If his average speed for the entire journey was $54 \mathrm{~km} / \mathrm{h}$, what was his average speed for the last $\frac{2}{3}$ of the distance?
15. A car and a truck were traveling to Town $Q$ at constant average speeds. The car overtook the truck when they were 420 km from Town Q. The car arrived at Town Q at 6:30 p.m. while the truck was still 120 km away from Town Q. The truck arrived at Town Q at 8:30 p.m. What was the average speed of the car?

## Answer Key

1. (a) $12 a+7$ (b) $5 b$
2. (a) 22
(b) 11
3. (a) $\$(26-p)$
(b) $\$ 12.50$
4. (a) $(4 x+3)$ years
(b) 11 years
5. (a) $\$\left(\frac{50-y}{4}\right)$
(b) $\$ 7.85$
6. (a) $\frac{6}{5}$
(b) $\$ 165$
7. 2 kg 500 g
8. $19: 21$
9. 2 L 550 ml
10. 25 gal
11. 4050 visitors
12. 1250 beads
13. 2 h 24 min
14. $60 \mathrm{~km} / \mathrm{h}$
15. $84 \mathrm{~km} / \mathrm{h}$
