

Variables and expressions

Grade 5 Pre-Algebra Worksheet

Write an expression to answer each question. State what the variable is. The first one is done for you as an example. (Variables may vary)

	Expression	<u>Variable</u>
John scored 3 more points than James. How many points did John score?	p + 3	<pre>p = number of points James scored</pre>
1. Alex collected 26 action figures last year and another r action figures this year. How many action figures does he have in all?		
2. In five years, Tom will be m years old. How old is Tom now?		
3. Aubrey needs to cut 3 pieces from a 100 inches ribbon tape. Each piece is r inches long. How long is the remaining ribbon?		
4. Charlotte works for \$335 a month plus \$5 per hour of overtime. If she works a total t hours overtime in a month, how much will she be paid?		
5. A parking fee costs \$4.00 for the first 3 hours and \$n for every extra hour. How much will the parking fee be if the customer parks for 5 hours?		
6. Gerry and his five friends earned a profit of \$e from their drink stand. If they divide the earnings equally among them, how much will each get?		
7. A lawyer charges a fee of \$900 plus \$50 per court appearance. If there are n appearances in a client's case, how much will the client be charged?		
8. Jean's earns \$250 a month plus \$d for each dress she sells. If she sells 64 dresses in a month, how much will she earn in all?		
9. The area of the rectangle is 58 cm ² . If the width of the rectangle is w cm, what is its length?		
10. Nicole has \$20 dollars in her pocket. If she buys 8 cans of juice for \$j each, how much money does she has left?		



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	Expression	<u>Variable</u>
John scored 3 more points than James. How many points did John score?	p + 3	<pre>p = number of points James scored</pre>
1. Alex collected 26 action figures last year and another r action figures this year. How many action figures does he have in all?	<u>r + 26</u>	r = number of collected action figures last year
2. In five years, Tom will be m years old. How old is Tom now?	<u>m - 5</u>	m = age of Tom next 5 years
3. Aubrey needs to cut 3 pieces from a 100 inches ribbon tape. Each piece is r inches long. How long is the remaining ribbon?	<u>100 – 3r</u>	r = length of each piece of ribbon
4. Charlotte works for \$335 a month plus \$5 per hour of overtime. If she works a total t hours overtime in a month, how much will she be paid?	\$5t + 335	t = number of overtime hours
5. A parking fee costs \$4.00 for the first 3 hours and \$n for every extra hour. How much will the parking fee be if the customer parks for 5 hours?	<u>4 + 2n</u>	n = amount of parking fee for every exceeding hour
6. Gerry and his five friends earned a profit of \$e from their drink stand. If they divide the earnings equally among them, how much will each get?	<u>e</u> 5	e = amount of earnings
7. A lawyer charges a fee of \$900 plus \$50 per court appearance. If there are n appearances in a client's case, how much will the client be charged?	900 + 50n	n = number of appearances in client's case
8. Jean's earns \$250 a month plus \$d for each dress she sells. If she sells 64 dresses in a month, how much will she earn in all?	<u>250 + 64d</u>	d = number of dress
9. The area of the rectangle is 58 cm ² . If the width of the rectangle is w cm, what is its length?	58 w	w = width
10. Nicole has \$20 dollars in her pocket. If she buys 8 cans of juice for \$j each, how much money does she has left?	<u>\$20 – 8d</u>	d = cost of each can of juice