

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)

	<u>Expression</u>	<u>Variable</u>
<i>John scored 3 more points than James. How many points did John score?</i>	$p + 3$	$p = \text{number of points James scored}$
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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	<u>Expression</u>	<u>Variable</u>
<i>John scored 3 more points than James. How many points did John score?</i>	$p + 3$	$p = \text{number of points James scored}$
1. Alex collected 26 action figures last year and another r action figures this year. How many action figures does he have in all?	$r + 26$	$r = \text{number of collected action figures last year}$
2. In five years, Tom will be m years old. How old is Tom now?	$m - 5$	$m = \text{age of Tom next 5 years}$
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?	$100 - 3r$	$r = \text{length of each piece of ribbon}$
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?	$\$5t + 335$	$t = \text{number of overtime hours}$
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?	$4 + 2n$	$n = \text{amount of parking fee for every exceeding hour}$
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?	$\frac{e}{6}$	$e = \text{amount of earnings}$
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?	$900 + 50n$	$n = \text{number of appearances in client's case}$
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?	$250 + 64d$	$d = \text{number of dress}$
9. The area of the rectangle is 58 cm^2 . If the width of the rectangle is w cm, what is its length?	$\frac{58}{w}$	$w = \text{width}$
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?	$\$20 - 8d$	$d = \text{cost of each can of juice}$