

Year 8 Mathematics	Assignment 3	Date Due:
1.	Simplify:	
	(a) $3a + 2a$	(b) $3x + 2y - x + 2y$
	(d) $12m \div 2m$	(e) $3a \times 2b \times 4$
		(c) $5x^2 - 9x^2 + x^2$
		(f) $\frac{7xy}{14xy}$
2.	Write each of the following as an algebraic expression:	
	(a) 5 more k	(b) half of k
	(c) the product of 3 and k decreased by 10	
	(d) 7 more than the sum of a and k	
3.	Simplify:	
	(a) $\frac{d}{3} + \frac{d}{3}$	(b) $\frac{m}{3} + \frac{m}{2}$
		(c) $\frac{n}{6} + \frac{5n}{8}$
4.	Expand:	
	(a) $4(x + 2)$	(b) $-7(2k + 1)$
		(c) $5y(7y - 2)$
5.	Expand and simplify:	
	(a) $m(m - 2) + 4m$	(b) $8 + 4(7p - 2)$
	(c) $6(x - y) + 3(x + 2y)$	(d) $3(2k + 4) - 2(k - 1)$
6.	Factorise fully:	
	(a) $2m + 6$	(b) $d^2 - d$
		(c) $2ab + 3a$
		(d) $2x^2y + xy^2$
7.	(a) Write 85% as a simplified fraction	
	(b) Change $3\frac{1}{2}\%$ to a decimal	
	(c) Change $\frac{5}{8}$ to a percentage	
	(d) Write 1.3 as a percentage	
	(e) Arrange 0.105, 10%, $\frac{11}{100}$ and 0.015 in ascending order	
	(f) Find 2% of \$15	
	(g) Find $33\frac{1}{3}\%$ of 1 hour	
	(h) What percentage is 45cm of 1m?	
	(i) What percentage is 45 minutes of $1\frac{1}{2}$ hours?	
8.	(a) The cost of a salad sandwich which costs \$2.60 increased by 15%. Find the new price.	
	(b) The population of Banksia decreases by 3.5%, from 3 400 people. Find the new population.	
	(c) Find the percentage profit on a clock bought for \$225 and sold for \$325.	
	(d) If 35% of an amount is 1995, find the amount.	