

Facts About Dogs

Simplify each expression. Find the code letter for the correct answer. Problems 10-21 must be copied and completed on a separate piece of paper, with all steps as shown in class.

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| <p>1. $7x - (3x + 8) =$
 2. $10x + (7x + 5)$
 3. $2a + 4c - (a - 2c)$
 4. $5a - 2c + 7 - (6a - 3c + 2)$
 5. $a - b - (a + b)$
 6. $7a - 3c - 4x - (5a - 8c - 2x)$
 7. $2[5 + 6(8 - 3)]$
 8. $3[4 - 3(7 - 1)]$
 9. $[7(8 - 2) + 9] - [13 - 2(11 - 6) + 1]$
 10. $[13 - 2(7 - 4) - 8] - [5 + 6(12 - 5) - 38]$
 11. $[5(2x + 3) - 6] + [6 - 3(3x - 1) - 8]$
 12. $3[5x - 4] - [-30 - 45x]$
 13. $2[15 + 2(9 - 2)] - 3[17 - 4(8 - 5)]$
 14. $3\{[9(x - 2) + 7] - 2[4(x + 5) - 36]\}$</p> | <p>15. $4[24 - 3(7x + 6)] - 6(4 - 14x)$
 16. $-53 - 2[7 - 6(5 + 11)] - (2 - 3) - 4$
 17. $6(9x + 3) + 6x$
 18. $2[100 - 80] - [100 - 2(50 - 60)]$
 19. $4 - [3x - 6y] - 2[4x + 5y]$
 20. $7 - 5[5 - (3 - 1)]$
 21. $8x - 4[2x - 5(3x + 1)] - 2[x - (x - 1)]$</p> |
|--|---|

Code Letter	Answer
A	$60x + 18$
B	$2a + 5c - 2x$
C	43
D	-80
E	$x + 10$
F	70
G	0
H	$4 - 11x - 4y$
I	-42
J	10
K	$4x - 8$
L	$17x + 5$
M	$a + 6c$
N	122
O	47
P	$4x + 8$
Q	$2a + 5c - x$
R	-10
S	-2b
T	$-a + c + 5$
U	-8
V	2b
W	$3x + 63$
X	80
Y	$60x - 18$
Z	42

This dog is one of the oldest breeds:

$$\frac{12}{7} - \frac{15}{19} - \frac{17}{16} - \frac{19}{9} + \frac{20}{16} + \frac{18}{18}$$

This is the smallest breed of dog:

$$\frac{13}{19} - \frac{8}{19} + \frac{20}{12} - \frac{19}{20} + \frac{12}{12}$$

This dog is one of the largest breeds:

$$\frac{15}{10} - \frac{11}{12} + \frac{4}{18} - \frac{21}{16} + \frac{11}{11}$$

This massive dog used to protect flocks from wolves:

$$\frac{1}{21} - \frac{10}{21} + \frac{6}{21} - \frac{5}{19}$$

This is one of the fastest dogs:

$$\frac{5}{21} - \frac{2}{20} + \frac{1}{8}$$

This is a black Belgian sheep dog:

$$\frac{15}{10} - \frac{9}{11} + \frac{16}{11} - \frac{16}{18} + \frac{21}{11} - \frac{2}{2}$$

This hunting dog is nicknamed "the gray ghost":

$$\frac{14}{11} - \frac{8}{3} + \frac{17}{10} - \frac{17}{16} + \frac{11}{10}$$

This dog was bred to tackle badgers:

$$\frac{15}{2} - \frac{11}{16} - \frac{9}{7} - \frac{8}{3} + \frac{21}{21} - \frac{2}{2} - \frac{4}{11} + \frac{10}{10} - \frac{8}{8} + \frac{11}{10}$$

