

Homework #3 Factor Pairs

Date _____

Find each product.

1) $(4x + 2)(3x^2 + 7x + 6)$

2) $(3v + 6)(2v^2 - 4v - 8)$

3) $(8x^2 - 2x - 6)(7x^2 - 5x - 7)$

4) $(7m^2 + 7m + 5)(m^2 - m + 6)$

5) Create the complete list of factor pairs for each number.

a) 75

b) 102

c) 66

d) 200

e) 81

f) 2018

Find the factor pair satisfies the given conditions: (NOTE: M=multiuply to, A=adds to). One of these questions does not have a pair that works. You must show the entire list to verify that that is the case.

6) M: -40
A: -6

7) M: 68
A: 21

8) M: 56
A: -15

9) M: 6
A: 7

10) M: -450
A: -15

11) M: 72
A: -22

12) M: -6
A: 5

13) M: -24
A: 4

14) M: -100
A: 0

15) M: 169
A: 26

16) M: -12
A: 1

17) M: 80
A: 21

18) M: 1050
A: 89

19) M: -756
A: -101

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Find each product.

1) $(4x + 2)(3x^2 + 7x + 6)$

$$12x^3 + 34x^2 + 38x + 12$$

2) $(3v + 6)(2v^2 - 4v - 8)$

$$6v^3 - 48v - 48$$

3) $(8x^2 - 2x - 6)(7x^2 - 5x - 7)$

$$56x^4 - 54x^3 - 88x^2 + 44x + 42$$

4) $(7m^2 + 7m + 5)(m^2 - m + 6)$

$$7m^4 + 40m^2 + 37m + 30$$

5) Create the complete list of factor pairs for each number.

a) 75

b) 102

c) 66

d) 200

e) 81

f) 2018

Find the factor pair satisfies the given conditions: (NOTE: M=multiuply to, A=adds to). One of these questions does not have a pair that works. You must show the entire list to verify that that is the case.

6) M: -40
A: -6

-10 and +4

7) M: 68
A: 21

+7 and +14

8) M: 56
A: -15

-8 and -7

9) M: 6
A: 7

+1 and +6

10) M: -450
A: -15

-30 and +15

11) M: 72
A: -22

-18 and -4

12) M: -6
A: 5

+6 and -1

13) M: -24
A: 4

None

14) M: -100
A: 0

-10 and +10

15) M: 169
A: 26

13 and 13

16) M: -12
A: 1

+4 and -3

17) M: 80
A: 21

+16 and +5

18) M: 1050
A: 89

+14 and +75

19) M: -756
A: -101

+7 and -108