8-2 Using the Distributive Property to Factor

Use the Distributive Property to factor each polynomial.

1.) 3a + 3b

2.) 24x + 48y

3.) 4d2 + 16

4.) 15ad + 30 a2d2

5.) 32a2 + 24b2

6.) 36xy2 + 48x2y

7.) 75b2g3 + 60bg3

8.) 24cx + 9ax3

Use the Distributive Property to factor each polynomial.

9.) 64 – 40ab

10.) 6r2t – 3rt2

11.) 12a2 – 15ab

12.) 8p2r2 – 24pr3 + 16pr

13.) x2 + 2x + x

14.) 12a2 + 3a + 6a

15.) 4b2 – 12b + 6

16.) 5x3y2 + 10x2y – 25x

Use the factor by grouping method to factor the following polynomials.

17.) fg + 5g + 4f + 20

18.) a2 + 4a + 6a + 24

19.) hj + 2h + 5j + 10

20.) xy + y + 2x + 2

21.) 45pq + 27q + 50p + 30q

22.) 24ty + 4y + 18t + 3

23.) 3dt + 21d + 5t + 35

24.) 2ab + 8b + 3a + 12

Use the factor by grouping method to factor the following polynomials.

25.) 5br – 25b + 2r - 10

26.) 6xy – 8x + 15y - 20

27.) rp – 9r + 9p - 81

28.) 12a2 + 3a – 8a - 2

29.) 4m2 + 4mp + 3mp + 3p2

30.) 12a2 – 15ab – 16a + 20b

31.) 4b2 – 12b + 2b - 6

32.) 48tu – 90t + 32u - 60