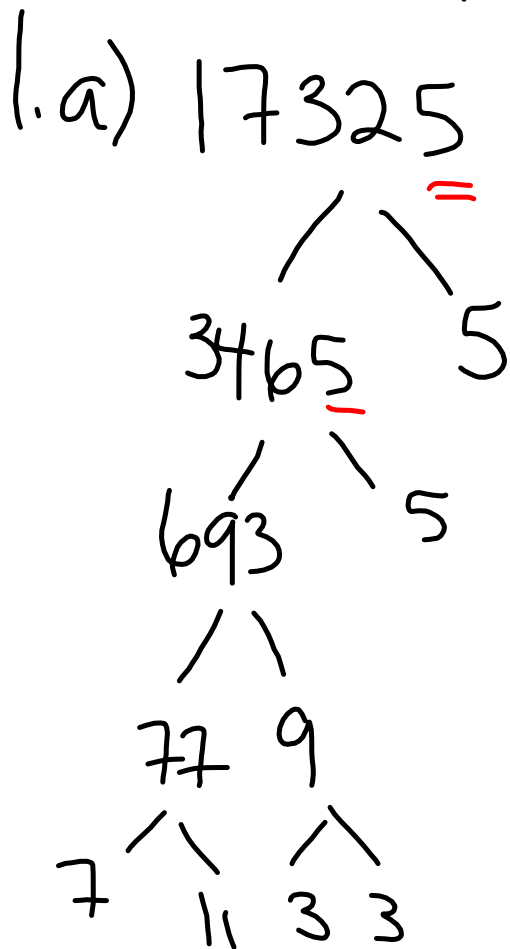


Factoring Test Review Answers



$$3^2 \cdot 5^2 \cdot 7 \cdot 11$$

$$\begin{array}{r} b) \quad 1690 \\ \quad \swarrow \quad \searrow \\ \quad 169 \quad 10 \\ \quad \swarrow \quad \searrow \quad \swarrow \quad \searrow \\ 13 \quad 13 \quad 5 \quad 2 \\ \\ 2 \cdot 5 \cdot 13^2 \end{array}$$

$$2. \quad 4x^6y^3 + 10y^5$$

Common Factor

$$2y^3(2x^6 + 5y^2)$$

$$3 a) \quad (x-7)^3 = x^3 - 21x^2 + 147x - 343$$

$$(x-7)(x-7)(x-7)$$

$$b) \quad 6x^5 - 23x^4 + 41x^3 - 44x^2 + 40x - 56$$

$$c) \quad 22xy - 33x + 3y + 15$$

$$d) \quad -26x^2 + 36x - 16$$

$$4) \quad 1) \quad 6b^2 \underline{(a^2 - 4)}$$
$$6b^2(a+2)(a-2)$$

$$2) \quad (3x-5)(x+2)$$

$$3) \quad (x-2y)(x+2y)$$

$$4) \quad (m-11)(m+1)$$

5) $(5x-3)^2$

9) $(2x+25y)^2$

6) $(n-3)(2n-3)$

10) $(6n-9)(6n+9)$

7) $3(5x^2-4y^2)$

11) $(a+3)(a-12)$

8) $2(x-6)(x+5)$

12) $5x(3y-5xy^3+15x)$

$$13) 8(-7x^3 + 10) \quad 14) (3m^2 + 5n^2)^2$$

$$15) (v - 7)(5v + 9) \quad 16) (8x - 6y)(8x + 6y)$$

$$17) 2(x - 5)(x + 4) \quad 18) 4x^2 + 25$$

$$19) (x - 5y)(3x - 2y) \quad 20) (10x - 7)^2$$

$$21) (5r - 7)(5r + 7) \quad 22) (p - 12)(p + 7)$$