EduSahara™ Learning Center Assignment

Grade : Class VIII, CBSE
Chapter : Factorisation
Name : Division of Polynomials
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1. The quotient when z is divided by 8 is

(i) $(-\frac{1}{8}z)$ (ii) $\frac{1}{10}z$ (iii) $\frac{3}{8}z$ (iv) $\frac{1}{8}z$ (v) $\frac{1}{6}z$

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2. The quotient when $2t^2$ is divided by $(t-6)$ is

(i) 12 (ii) $(3t+12)$ (iii) $(4t+12)$

(iv) $(t+12)$ (v) $(2t+12)$

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3. The quotient when $(-6p-7)$ is divided by $(p-3)$ is

(i) (-3) (ii) (-6) (iii) (-8) (iv) (-7) (v) (-5)

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4. The quotient when $(7d^2+9d-4)$ is divided by $(d+6)$ is

(i) $(10d-33)$ (ii) $(6d-33)$ (iii) $(4d-33)$

(iv) $(7d-33)$ (v) $(8d-33)$

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5. The quotient when $(3r^2-3r)$ is divided by $(r+9)$ is

(i) $(r-30)$ (ii) $(3r-30)$ (iii) $(2r-30)$

(iv) $(6r-30)$ (v) $(4r-30)$

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6. The quotient when $(9m^3 - 4m^2 + 4m)$ is divided by $(m + 1)$ is

(i) $(10m^2 - 13m + 17)$ (ii) $(11m^2 - 13m + 17)$ (iii) $(8m^2 - 13m + 17)$

(iv) $(7m^2 - 13m + 17)$ (v) $(9m^2 - 13m + 17)$

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7. The quotient when $(-k^4 + 4k^3 - 4k^2 - 2k + 8)$ is divided by $(k - 7)$ is

(i) $(-2k^3 - 3k^2 - 25k - 177)$

(ii) $(-k^3 - 3k^2 - 25k - 177)$

(iii) $(-3k^2 - 25k - 177)$

(iv) $(-4k^3 - 3k^2 - 25k - 177)$

(v) $(2k^3 - 3k^2 - 25k - 177)$

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8. The quotient when $(r^5 - r^4 + 4r^3 - 5r^2 - 2r + 2)$ is divided by $(r - 9)$ is

(i) $(2r^4 + 8r^3 + 76r^2 + 679r + 6109)$

(ii) $(4r^4 + 8r^3 + 76r^2 + 679r + 6109)$

(iii) $(-r^4 + 8r^3 + 76r^2 + 679r + 6109)$

(iv) $(8r^3 + 76r^2 + 679r + 6109)$

(v) $(r^4 + 8r^3 + 76r^2 + 679r + 6109)$

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9. The quotient of $(16a^2 + 16ab + 4b^2) \div (4a + 2b)$ is

(i) $(4a+5b)$ (ii) $(3a+2b)$ (iii) $(4a-b)$

(iv) $(4a+2b)$ (v) $(5a+2b)$

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10. The quotient of $(25a^2-50ab+25b^2) \div (5a-5b)$ is

(i) $(4a-5b)$ (ii) $(5a-7b)$ (iii) $(5a-5b)$

(iv) $(6a-5b)$ (v) $(5a-3b)$

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11. The quotient of $(9a^2-25b^2) \div (3a+5b)$ is

(i) $(4a-5b)$ (ii) $(2a-5b)$ (iii) $(3a-3b)$

(iv) $(3a-8b)$ (v) $(3a-5b)$

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12. The quotient of $(125a^3-225a^2b+135ab^2-27b^3) \div (5a-3b)$ is

(i) $(26a^2-30ab+9b^2)$ (ii) $(25a^2-27ab+9b^2)$

(iii) $(25a^2-30ab+9b^2)$ (iv) $(24a^2-30ab+9b^2)$

(v) $(25a^2-32ab+9b^2)$

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13. The quotient of $(125a^3-375a^2b+375ab^2-125b^3) \div (5a-5b)$ is

(i) $(25a^2-52ab+25b^2)$ (ii) $(24a^2-50ab+25b^2)$

(iii) $(25a^2-47ab+25b^2)$ (iv) $(26a^2-50ab+25b^2)$

(v) $(25a^2-50ab+25b^2)$

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14. The quotient of
$(4a^2+8ab+16ac+4b^2+16bc+16c^2) \div (2a+2b+4c)$ is

(i) $(3a+2b+4c)$ (ii) $(a+2b+4c)$

(iii) $(2a+4c)$ (iv) $(2a+2b+4c)$

(v) $(2a+5b+4c)$

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15. The quotient of $(27a^3-125b^3) \div (3a-5b)$ is

(i) $(10a^2+15ab+25b^2)$ (ii) $(9a^2+15ab+25b^2)$

(iii) $(9a^2+18ab+25b^2)$ (iv) $(9a^2+13ab+25b^2)$

(v) $(8a^2+15ab+25b^2)$

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16. The quotient of $(27a^3-64b^3) \div (3a-4b)$ is

(i) $(9a^2+9ab+16b^2)$ (ii) $(9a^2+12ab+16b^2)$

(iii) $(9a^2+14ab+16b^2)$ (iv) $(8a^2+12ab+16b^2)$

(v) $(10a^2+12ab+16b^2)$

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17. The quotient of
$(125a^3-60abc-8b^3-8c^3) \div (5a-2b-2c)$ is

(i) $(25a^2+13ab+10ac+4b^2-4bc+4c^2)$

(ii) $(25a^2+10ab+10ac+4b^2-4bc+4c^2)$

(iii) $(26a^2+10ab+10ac+4b^2-4bc+4c^2)$

(iv) $(24a^2+10ab+10ac+4b^2-4bc+4c^2)$

(v) $(25a^2+8ab+10ac+4b^2-4bc+4c^2)$

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18. $(9x^3+3x^2-8x-4) \div (-9x^2-12x-4) =$

(i) $(x+1)$ (ii) $(-2x+1)$ (iii) $(-x-1)$

(iv) 1 (v) $(-x+1)$

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19. $(18x^4+33x^3-84x^2-45x+54) \div (6x^3+15x^2-18x-27) =$

(i) $(2x-2)$ (ii) $(-3x-2)$ (iii) $(3x-2)$

(iv) $(3x+2)$ (v) $(4x-2)$

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20. $(16x^4y^4+112x^3y^3) \div 4x^2y^2 =$

(i) $(4x^3y^4+28xy)$ (ii) $(4x^3y^3+28xy)$ (iii) $(4x^2y^2+28y^2)$

(iv) $(4x^2y^2+28xy)$ (v) $(4x^2y^2+28xy^2z)$

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21. $(20x^4y^3z^3+4x^4y^2z^4+120x^4y^2z^3) \div 2x^2yz^2 =$

(i) $(10x^2y^2z+2x^2yz^2+60x^2yz)$ (ii) $(10x^3y^4z+2x^2yz^2+60x^2yz)$

(iii) $(2x^2y^2z^3+10x^2y^2z+60x^2yz)$ (iv) $(10x^3y^3z+2x^2yz^2+60x^2yz)$

(v) $(10x^2y^2z+60x^2yz+2xy^2z^2)$

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22. $(12x^3+16x^2) \div 4x$

(i) $(3x^2+5x)$ (ii) $(3x^2+4x)$ (iii) $(2x^2+4x)$

(iv) $(3x^2-4x)$ (v) $(-3x^2+4x)$

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23. $(15x^4+11x^3+2x^2) \div (5x^2+2x)$

(i) $(3x^2-x)$ (ii) $(3x^2+x)$ (iii) $(3x^2+2x)$

(iv) $(-3x^2+x)$ (v) $(2x^2+x)$

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24. $(4x^4 - 51x^3 + 122x^2 + 240x) \div (x^2 - 14x + 48)$

(i) $(4x^2 + 6x)$ (ii) $(-4x^2 + 5x)$ (iii) $(4x^2 + 4x)$

(iv) $(4x^2 + 5x)$ (v) $(4x^2 - 5x)$

Assignment Key

1) (iv)
2) (v)
3) (ii)
4) (iv)
5) (ii)
6) (v)
7) (ii)
8) (v)
9) (iv)
10) (iii)
11) (v)
12) (iii)
13) (v)
14) (iv)
15) (ii)
16) (ii)
17) (ii)
18) (v)
19) (iii)
20) (iv)
21) (i)
22) (ii)
23) (ii)
24) (iv)