



1) Solve $14d^2 - 15d + 1 = 0$ Round your solutions to 1 decimal place. Answer: _____	2) Factorise $5q^2 + 37q + 14$ Answer: _____	3) Solve by factorising $x^2 + 14x - 15 = 0$ Answer: _____
4) $\frac{2^{19} * 2^{20}}{2^{16}}$ Answer: _____	5) Find the value of 'j' by completing the square of the following equation: $2 + 12j + 20$ Answer: _____	6) Find the value of 'j' by completing the square of the following equation: $2 + 8j + 15$ Answer: _____
7) Solve $7f^2 - 3f - 13 = 0$ Round your solutions to 1 decimal place. Answer: _____	8) Factorise $s^2 + 11s + 18$ Answer: _____	9) Solve by factorising $x^2 + 11x + 18 = 0$ Answer: _____
10) $2^8 * 2^{15}$ Answer: _____	11) Solve $20q^2 + 16q - 5 = 0$ Round your solutions to 1 decimal place. Answer: _____	12) Factorise $j^2 + 7j + 12$ Answer: _____
13) $6^{12} * 6^{11}$ Answer: _____	14) Factorise $5s^2 + 7s + 2$ Answer: _____	15) Find the next three numbers in the sequence 14, 6, 9, 1, 4, -4, -1, __, __, __ Answer: _____



16) Factorise $3s^2 + 16s + 13$

Answer: _____

17) Factorise $j^2 + 4j + 4$

Answer: _____

18) Find the next three numbers in the sequence
16, 8, 12, 4, 8, 0, 4, __, __, __

Answer: _____

19) Find the next three numbers in the sequence
4, 0, 0, -4, -4, -8, -8, __, __, __

Answer: _____

20) Factorise $4f^2 + 12f + 5$

Answer: _____

21) Solve $18f^2 + 17f + 1 = 0$
Round your solutions to 1 decimal place.

Answer: _____

22) Find the next three numbers in the sequence
75, 72, 360, 357, 1785, 1782, 8910, __, __, __

Answer: _____

23) Solve by factorising
 $x^2 + 8x + 16 = 0$

Answer: _____

24) Factorise $x^2 + 9x + 14$

Answer: _____

25) Factorise $2d^2 + 16d + 14$

Answer: _____

26) Solve $12f^2 + 4f - 14 = 0$
Round your solutions to 1 decimal place.

Answer: _____

27) Factorise $5j^2 + 22j + 17$

Answer: _____

28) Factorise $6j^2 + 62j + 20$

Answer: _____

29) Solve $6d^2 + 15d - 1 = 0$
Round your solutions to 1 decimal place.

Answer: _____

30) Factorise $j^2 + 6j + 8$

Answer: _____



- 31) Find the next three numbers in the sequence
9,4,6,1,3,-2,0 __, __, __

Answer: _____

- 32) Solve by factorising
 $x^2 + 8x + 12 = 0$

Answer: _____

- 33) $(7^9)^{10}$

Answer: _____

- 34) $4^{20} * 4^{14}$

Answer: _____

- 35) Factorise $x^2 + 4x + 4$

Answer: _____

- 36) $\frac{q^{13} * q^7}{q^{16}}$

Answer: _____

- 37) Find the next three numbers in the sequence
75,78,390,393,1965,1968,9840 __, __, __

Answer: _____

- 38) Find the next three numbers in the sequence
0,1,1,2,3,5,8 __, __, __

Answer: _____

- 39) Solve by factorising
 $s^2 + 19s + 18 = 0$

Answer: _____

- 40) m^7 / m^1

Answer: _____

- 41) Find the next three numbers in the sequence
19,14,21,16,23,18,25 __, __, __

Answer: _____

- 42) Solve $3s^2 + 5s - 6 = 0$
Round your solutions to 1 decimal place.

Answer: _____

- 43) Factorise $2d^2 + 12d + 18$

Answer: _____

- 44) Factorise $9d^2 + 15d + 4$

Answer: _____

- 45) Factorise $q^2 + 6q + 8$

Answer: _____



46) Find the value of 'q' by completing the square of the following equation: $x^2 + 8q + 15$ Answer: _____	47) Solve $4f^2 - 12f - 3 = 0$ Round your solutions to 1 decimal place. Answer: _____	48) Find the value of 'j' by completing the square of the following equation: $x^2 + 12j + 20$ Answer: _____
49) Factorise $s^2 + 5s + 6$ Answer: _____	50) Find the next three numbers in the sequence 5, 0, 0, -5, -5, -10, -10, __, __, __ Answer: _____	51) Solve $12s^2 - 8s - 6 = 0$ Round your solutions to 1 decimal place. Answer: _____
52) Find the value of 'j' by completing the square of the following equation: $x^2 + 12j + 20$ Answer: _____	53) Solve by factorising $f^2 - 10f + 16 = 0$ Answer: _____	54) Solve by factorising $f^2 + 9f + 14 = 0$ Answer: _____
55) $\frac{3^3 * 3^2}{3^1}$ Answer: _____	56) Solve by factorising $x^2 - 10x + 16 = 0$ Answer: _____	57) Factorise $j^2 + 7j + 10$ Answer: _____
58) $(3^{14})^7$ Answer: _____	59) Find the value of 'q' by completing the square of the following equation: $x^2 + 4q + 4$ Answer: _____	60) Find the value of 'd' by completing the square of the following equation: $x^2 + 6d + 8$ Answer: _____



61) Find the value of 's' by completing the square of the following equation: $x^2 + 10x + 16$ Answer: _____	62) Solve by factorising $j^2 + 13j - 14 = 0$ Answer: _____	63) Solve by factorising $x^2 - 15x + 14 = 0$ Answer: _____
64) $9^{12} \div 9^9$ Answer: _____	65) Solve by factorising $j^2 - 14j + 13 = 0$ Answer: _____	66) Solve by factorising $s^2 - 3s - 10 = 0$ Answer: _____
67) Find the next three numbers in the sequence 25, 26, 130, 131, 655, 656, 3280 __, __, __ Answer: _____	68) Find the value of 'x' by completing the square of the following equation: $x^2 + 6x + 9$ Answer: _____	69) Factorise $8q^2 + 54q + 13$ Answer: _____
70) Solve $2d^2 + 18d - 19 = 0$ Round your solutions to 1 decimal place. Answer: _____	71) $(f^{12})^{16}$ Answer: _____	72) Factorise $f^2 + 11f + 18$ Answer: _____
73) Factorise $8s^2 + 21s + 10$ Answer: _____	74) Find the value of 's' by completing the square of the following equation: $x^2 + 10x + 16$ Answer: _____	75) Solve by factorising $x^2 + 12x - 13 = 0$ Answer: _____



76) Solve $12q^2 - 3q - 5 = 0$ Round your solutions to 1 decimal place. Answer: _____	77) Find the value of 'j' by completing the square of the following equation: $2 + 8j + 12$ Answer: _____	78) Factorise $9d^2 + 27d + 18$ Answer: _____
79) Find the next three numbers in the sequence 0,1,1,2,3,5,8_____,_____ Answer: _____	80) $(m^{10})^{12}$ Answer: _____	81) Factorise $j^2 + 10j + 16$ Answer: _____
82) $f^8 * f^8$ Answer: _____	83) $(9^1)^4$ Answer: _____	84) Find the next three numbers in the sequence 4,0,0,-4,-4,-8,_____,_____ Answer: _____
85) Solve by factorising $d^2 + 4d - 12 = 0$ Answer: _____	86) Factorise $6x^2 + 56x + 18$ Answer: _____	87) Solve $12j^2 - 20j + 2 = 0$ Round your solutions to 1 decimal place. Answer: _____
88) Find the next three numbers in the sequence 22,16,24,18,26,20,28_____,_____ Answer: _____	89) Solve $7x^2 - 8x - 17 = 0$ Round your solutions to 1 decimal place. Answer: _____	90) Find the next three numbers in the sequence 75,72,360,357,1785,1782,8910_____,_____ Answer: _____

Name: _____

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- 91) Find the value of 'd' by completing the square of the following equation:
 $x^2 + 8d + 15$

Answer: _____

92)
$$\frac{3^{10} * 3^{11}}{3^9}$$

Answer: _____

93)
$$\frac{8^{19} * 8^8}{8^{20}}$$

Answer: _____

- 94) Factorise $d^2 + 12d + 20$

Answer: _____

- 95) Find the value of 'x' by completing the square of the following equation:
 $x^2 + 10x + 16$

Answer: _____

- 96) Factorise $9j^2 + 11j + 2$

Answer: _____

97) $m^2 * m^2$

Answer: _____

- 98) Solve by factorising
 $s^2 - 12s - 13 = 0$

Answer: _____

- 99) Find the value of 'd' by completing the square of the following equation:
 $x^2 + 8d + 15$

Answer: _____

- 100) Find the value of 'f' by completing the square of the following equation:
 $x^2 + 6f + 9$

Answer: _____

Total: ____ / 100