**Verify algebraic solutions by substitution****1**What is the value of this equation when  $c=2$ ,  $z=5$ 

$$5c - 5z$$

|   |            |   |             |
|---|------------|---|-------------|
| A | $-13c$     | B | $-15c$      |
| C | $-15$      | D | $c^5 + -15$ |
| E | $5c - -15$ | F | $-19$       |

**2**What is the value of this equation when  $n=5$ ,  $z=2$ 

$$4(4n + 3z)$$

|   |        |   |        |
|---|--------|---|--------|
| A | 106    | B | $-400$ |
| C | $-100$ | D | 99     |
| E | 104    | F | 400    |

**3**What is the value of this equation when  $x=4$ ,  $m=2$ 

$$\frac{6x}{3m}$$

|   |           |   |          |
|---|-----------|---|----------|
| A | 4         | B | $6x - 4$ |
| C | $x^6 + 4$ | D | 102      |
| E | $-108$    | F | $-3x$    |

**4**What does this equation become when  $n=4$ ,  $m=8$ 

$$3(2n + 2m)$$

|   |                                      |
|---|--------------------------------------|
| A | $2 \times 4 - 2 \times 8$            |
| B | $3 \times (2 \times 4 + 2 \times 8)$ |

**5**What is the value of this equation when  $y=8$ ,  $z=2$ ,  $r=-2$ 

$$\frac{5y - 2r}{2z}$$

|   |            |   |           |
|---|------------|---|-----------|
| A | $y^5 + 11$ | B | 11        |
| C | $-328$     | D | $5y - 11$ |
| E | 4          | F | 328       |

**6**What is the value of this equation when  $z=-6$ ,  $d=-4$ ,  $b=-8$ 

$$-\frac{4z}{6d} + 5b$$

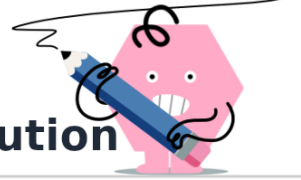
|   |            |   |       |
|---|------------|---|-------|
| A | $-240$     | B | $-39$ |
| C | $-41z$     | D | $-41$ |
| E | $4z - -41$ | F | $-4$  |

**7**What does this equation become when  $d=-4$ ,  $p=8$ ,  $r=5$ 

$$\frac{6d}{4p - 7r}$$

$$\frac{6 \cdot (-4)}{4 \cdot 8 - 7 \cdot 5}$$

$$\frac{6 \cdot (-4)}{4 + 8 + 7 + 5}$$

**Verify algebraic solutions by substitution****8**

Solve for the missing value

$$80 - 29 - 10 - ? = 29$$

|         |        |         |
|---------|--------|---------|
| A<br>13 | B<br>8 | C<br>20 |
| D<br>12 | E<br>5 | F<br>3  |

**9**

Solve for the missing value

$$1000 - ? = 940$$

|         |          |         |
|---------|----------|---------|
| A<br>60 | B<br>40  | C<br>80 |
| D<br>20 | E<br>110 | F<br>70 |

**10**

Solve for the missing value

$$? - 33 - 60 = 4$$

|         |          |          |
|---------|----------|----------|
| A<br>97 | B<br>94  | C<br>85  |
| D<br>79 | E<br>100 | F<br>124 |

**11**

Find the fraction that makes this equation correct

$$1\frac{3}{7} - \underline{\hspace{1cm}} = 1\frac{1}{7}$$

|                       |                      |                      |
|-----------------------|----------------------|----------------------|
| A<br>$2\frac{4}{7}$   | B<br>$\frac{18}{49}$ | C<br>$\frac{2}{7}$   |
| D<br>$1\frac{31}{49}$ | E<br>3               | F<br>$\frac{15}{17}$ |

**12**

Solve for the missing value

$$92 - ? - 13 - 10 = 13$$

|         |         |         |
|---------|---------|---------|
| A<br>64 | B<br>58 | C<br>50 |
| D<br>47 | E<br>56 | F<br>52 |