

$$\begin{aligned}
 a) 2^4 \cdot 3 + \sqrt{49} : (2^4 : 16) - (23 + 5^2) &= \\
 = 2^4 \cdot 3 + \sqrt{49} : (16 : 16) - (23 + 25) &= \\
 = 2^4 \cdot 3 + \sqrt{49} : 1 - 48 &= \\
 = 16 \cdot 3 + 7 : 1 - 48 &= \\
 = 48 + 7 - 48 &= \\
 = 55 - 48 &= \\
 = 7 &=
 \end{aligned}$$

$$\begin{aligned}
 b) (3^3 \cdot \sqrt{36} - 2^5 + 2^3 - \sqrt{16} + 2) : (-2) &= \\
 = (27 \cdot 6 - 32 + 8 - 4 + 2) : (-2) &= \\
 = (162 - 32 + 8 - 4 + 2) : (-2) &= \\
 = (130 + 8 - 4 + 2) : (-2) &= \\
 = (138 - 4 + 2) : (-2) &= \\
 = (134 + 2) : (-2) &= \\
 = 136 : (-2) = -68 &=
 \end{aligned}$$

$$\begin{aligned}
 c) -\sqrt{36} \cdot 1^6 - 5^3 : 25 + \sqrt{121} \cdot 2 &= \\
 = -6 \cdot 1 - 125 : 25 + 11 \cdot 2 &= \\
 = -6 - 5 + 22 &= \\
 = -11 + 22 &= \\
 = 11 &=
 \end{aligned}$$

$$\begin{aligned}
 d) -2^3 + 3^4 + (-2)^3 - \sqrt{121} \cdot 3 &= \\
 = -8 + 81 + (-8) - 11 \cdot 3 &= \\
 = -8 + 81 + (-8) - 33 &= \\
 = 73 + (-8) - 33 &= \\
 = 65 - 33 &= \\
 = 32 &=
 \end{aligned}$$

$$\begin{aligned}
 e) \sqrt{36} + (3^4 + 5 \cdot 7) + \sqrt{4} \cdot 9 - (2^3 - 7) &= \\
 = \sqrt{36} + (81 + 5 \cdot 7) + \sqrt{4} \cdot 9 - (8 - 7) &= \\
 = \sqrt{36} + (81 + 35) + \sqrt{4} \cdot 9 - 1 &= \\
 = \sqrt{36} + 116 + \sqrt{4} \cdot 9 - 1 &= \\
 = 6 + 116 + 2 \cdot 9 - 1 &= \\
 = 6 + 116 + 18 - 1 &= \\
 = 122 + 18 - 1 &= \\
 = 140 - 1 &= \\
 = 139 &=
 \end{aligned}$$

$$\begin{aligned}
 f) \sqrt{12+24} - 3 \cdot 7 - 2^3 : (-2) - (4-7)^2 &= \\
 = \sqrt{36} - 3 \cdot 7 - 8 : (-2) - (-3)^2 &= \\
 = 6 - 3 \cdot 7 - 8 : (-2) - 9 &= \\
 = 6 - 21 + 4 - 9 &= \\
 = -15 + 4 - 9 = -11 - 9 = -20 &=
 \end{aligned}$$

$$\begin{aligned}
 g) 13^2 \cdot \sqrt{25} - [(4^3 + \sqrt{144}) + (3^5 - 2^7)] &= \\
 = 13^2 \cdot \sqrt{25} - [(64 + 12) + (243 - 128)] &= \\
 = 13^2 \cdot \sqrt{25} - [76 + 115] &= \\
 = 13^2 \cdot \sqrt{25} - 191 &= \\
 = 169 \cdot 5 - 191 &= \\
 = 845 - 191 &= \\
 = 650 &=
 \end{aligned}$$

$$\begin{aligned}
 h) 2 \cdot (3-5)^3 + [12 \cdot \sqrt{12-3} + 6 \cdot (-2)^2 - 12] &= \\
 = 2 \cdot (-2)^3 + [12 \cdot \sqrt{9} + 6 \cdot (-2)^2 - 12] &= \\
 = 2 \cdot (-8) + [12 \cdot 3 + 6 \cdot 4 - 12] &= \\
 = -16 + [36 + 24 - 12] &= \\
 = -16 + [60 - 12] &= \\
 = -16 + 48 &= \\
 = 32 &=
 \end{aligned}$$