

$$eq1 := \frac{a \cdot (r^6 - 1)}{r - 1} = 32327011.49 \cdot 6$$

$$\frac{a (r^6 - 1)}{r - 1} = 1.939620689 \cdot 10^8 \quad (1)$$

$$eq2 := \frac{a \cdot (r^{18} - 1)}{r - 1} = 32327011.49 \cdot 6 + 51065497.13 \cdot 12$$

$$\frac{a (r^{18} - 1)}{r - 1} = 8.067480345 \cdot 10^8 \quad (2)$$

$$solve(\{eq1, eq2\}, \{a, r\});$$

$$\{a = 2.845662265 \cdot 10^7, r = 1.050825724\}, \{a = 97974.07272 - 3.340715921 \cdot 10^7 I, r = 0.9983096515 + 0.5763743460 I\}, \{a = -2.657148013 \cdot 10^8 + 5.095198523 \cdot 10^8 I, r = 0.5254128619 + 0.9100417718 I\}, \{a = 5.796087117 \cdot 10^7 - 6.681431843 \cdot 10^7 I, r = 1.152748692 I\}, \{a = -8.540576491 \cdot 10^8 + 5.095198523 \cdot 10^8 I, r = -0.5254128619 + 0.9100417718 I\}, \{a = 1.158237683 \cdot 10^8 - 3.340715921 \cdot 10^7 I, r = -0.9983096515 + 0.5763743460 I\}, \{a = -1.148229073 \cdot 10^9, r = -1.050825724\}, \{a = 1.158237683 \cdot 10^8 + 3.340715921 \cdot 10^7 I, r = -0.9983096515 - 0.5763743460 I\}, \{a = -8.540576491 \cdot 10^8 - 5.095198523 \cdot 10^8 I, r = -0.5254128619 - 0.9100417718 I\}, \{a = 5.796087117 \cdot 10^7 + 6.681431843 \cdot 10^7 I, r = -1.152748692 I\}, \{a = -2.657148013 \cdot 10^8 - 5.095198523 \cdot 10^8 I, r = 0.5254128619 - 0.9100417718 I\}, \{a = 97974.07272 + 3.340715921 \cdot 10^7 I, r = 0.9983096515 - 0.5763743460 I\}$$

$$a1 := 2.845662265 \cdot 10^7; r1 := 1.050825724;$$

$$\frac{2.845662265 \cdot 10^7}{1.050825724} \quad (4)$$

$$\sum_{i=0}^{17} a1 \cdot r1^i$$

$$8.067480358 \cdot 10^8 \quad (5)$$

$$unassign('a'), unassign('r')$$