

→ a:3;b:6;c:4;

(a) 3

(b) 6

(c) 4

→ eq1:x²=a²-r²;eq2:y²=b²-r²;eq3:z²=c²-r²;eq4:(x+y)/a=(y+z)/c;

(eq1) $x^2 = 9 - r^2$

(eq2) $y^2 = 36 - r^2$

(eq3) $z^2 = 16 - r^2$

(eq4) $\frac{y+x}{3} = \frac{z+y}{4}$

→ solve([eq1,eq2,eq3,eq4],[x,y,z,r]);

(%o10) $[[x = -\frac{3}{4}, y = -\frac{21}{4}, z = -\frac{11}{4}, r = \frac{3\sqrt{15}}{4}], [x = -\frac{3}{4}, y = -\frac{21}{4}, z = -\frac{11}{4}, r = -\frac{3\sqrt{15}}{4}], [x = \frac{3}{4}, y = \frac{21}{4}, z = \frac{11}{4}, r = \frac{3\sqrt{15}}{4}], [x = \frac{3}{4}, y = \frac{21}{4}, z = \frac{11}{4}, r = -\frac{3\sqrt{15}}{4}]]$