Vraag	Antwoord	Scores

Transition

8 maximumscore 4

- Er geldt $\left(\frac{1}{2}b\right)^2+(h-r)^2=r^2$ 1
- Hieruit volgt $\frac{1}{4}b^2+h^2-2hr+r^2=r^2$ 1
- Dit geeft $\frac{1}{4}b^2+h^2=2hr$ 1
- Hieruit volgt $r=\dfrac{\frac{1}{4}b^2+h^2}{2h}$ (dus formule 1 is juist) 1

9 maximumscore 3

- $(1{,}63=\dfrac{\frac{1}{4}b^2+h^2}{2h}$, dus) $2h\cdot 1{,}63=\frac{1}{4}b^2+h^2$ 1
- $b^2=13{,}04h-4h^2$, dus $b=\sqrt{13{,}04h-4h^2}$ 1
- Hieruit volgt $b=2\sqrt{3{,}26h-h^2}$ (dus $p=2$ en $q=3{,}26$) 1

of

- $(1{,}63=\dfrac{\frac{1}{4}b^2+h^2}{2h}$, dus) $2h\cdot 1{,}63=\frac{1}{4}b^2+h^2$ 1
- $b^2=4\cdot\left(2h\cdot 1{,}63-h^2\right)$, dus $b=\sqrt{4\cdot\left(2h\cdot 1{,}63-h^2\right)}$ 1
- Hieruit volgt $b=2\sqrt{3{,}26h-h^2}$ (dus $p=2$ en $q=3{,}26$) 1

of

- $(r=\dfrac{\frac{1}{4}b^2+h^2}{2h}$, dus) $2hr=\frac{1}{4}b^2+h^2$ 1
- $b^2=8hr-4h^2$, dus $b=\sqrt{8hr-4h^2}$ 1
- Hieruit volgt $b=2\sqrt{2rh-h^2}$, dus $b=2\sqrt{3{,}26h-h^2}$ (dus $p=2$ en $q=3{,}26$) 1