2. Which of the following are correct calculations for difference quotient of:

$p(w) = 7w^2 + 2w + 5$

$p(w) = 7w^2 + 2w + 5$

$p(w+h) = 7(h+w)^2 + 2(h+w) + 5$

$= 7h^2 + 14hw + 2h + 7w^2 + 2w + 5$

$$\frac{p(w+h)-p(w)}{h} = \frac{\left(7h^2+14wh+2h+7w^2+2w+5\right)-\left(7(w+1)^2+2(w+1)+5\right)}{h}$$

$$= \frac{7h^2+14wh+2h}{h}$$

$$= \frac{h(7h+14w+2)}{h}$$

$= 7h + 14w + 2$

$p(w) = 7w^2 + 2w + 5$

$p(w+h) = 7(h+w)^2 + 2(h+w) + 5$

$= 7h^2 + 14hw + 16h + 7w^2 + 16w + 14$

$$\frac{p(w+h)-p(w)}{h} = \frac{\left(7h^2+14wh+16h+7w^2+16w+14\right)-\left(7w^2+2w+5\right)}{h}$$

$$= \frac{7h^2+14wh+2h}{h}$$

$$= \frac{h(7h+14w+2)}{h}$$

$= 7h + 14w + 2$

$p(w) = 7w^2 + 2w + 5$

$p(w+h) = 7(h+w)^2 + 2(h+w) + 5$

$= 7h^2 + 14hw + 2h + 7w^2 + 2w + 5$

$$\frac{p(w+h)-p(w)}{h} = \frac{\left(7h^2+14wh+2h+7w^2+2w+5\right)-\left(7w^2+2w+5\right)}{h}$$

$$= \frac{7h^2+14wh+2h}{h}$$

$$= \frac{h(7h+14w+2)}{h}$$

$= 7h + 14w + 2$

$p(w) = 7w^2 + 2w + 5$

$p(w+h) = 7(h+w)^2 + 2(h+w) + 5$

$= 7h^2 + 14hw - 12h + 7w^2 - 12w + 10$

$$\frac{p(w+h)-p(w)}{h} = \frac{\left(7h^2+14wh+30h+7w^2+30w+37\right)-\left(7w^2+2w+5\right)}{h}$$

$$= \frac{7h^2+14wh+2h}{h}$$

$$= \frac{h(7h+14(w+1)+2)}{h}$$

$= 7h + 14w + 2$

Solution