difference quotient of: f(y) = y + 5 f(y) = y + 5 f(y+h) = h + y + 5 = h + y + 5 $\frac{f(y+h) - f(y)}{h} = \frac{(h+y+5) - (y+6)}{h}$

7. Which of the following are correct calculations for

```
  = \frac{h}{h} 
  = \frac{h(1)}{h} 
  = 1 
  f(y) = y + 5 
  f(y+h) = h + y + 5 
  = h + y + 6 
  \frac{f(y+h) - f(y)}{h} = \frac{(h+y+6) - (y+5)}{h} 
  = \frac{h}{h} 
  = \frac{h(1)}{h} 
  = 1
```

$$f(y) = y + 5$$

$$f(y+h) = h + y + 5$$

$$= h + y + 5$$

$$\frac{f(y+h) - f(y)}{h} = \frac{(h+y+5) - (y+5)}{h}$$

$$= \frac{h}{h}$$

$$= \frac{h(1)}{h}$$

$$= 1$$

```
f(y) = y + 5
f(y+h) = h + y + 5
= h + y + 4
\frac{f(y+h) - f(y)}{h} = \frac{(h+y+7) - (y+5)}{h}
= \frac{h}{h}
= \frac{h(1)}{h}
= 1
```

Solution