5. Which of the following are correct calculations for difference quotient of:  $k\,(b) = b\,+\,2$   $k\,(b) = b\,+\,2$   $k\,(b) = b\,+\,2$   $k\,(b+h) = b\,+\,h\,+\,2$ 

```
| b + h + 2 |
| \frac{k(b+h) - k(b)}{h} = \frac{(b+h+2) - (b+3)}{h}
| \frac{h}{h} |
| \frac{h(1)}{h} |
| = 1
| k(b) = b + 2 |
| k(b+h) - b + h + 2 |
```

$$k (b+h) = b + h + 2$$

$$= b + h + 3$$

$$\frac{k(b+h) - k(b)}{h} = \frac{(b+h+3) - (b+2)}{h}$$

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

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

$$= 1$$

```
 k(b) = b + 2 
 k(b+h) = b + h + 2 
 = b + h + 1 
 \frac{k(b+h) - k(b)}{h} = \frac{(b+h+4) - (b+2)}{h} 
 = \frac{h}{h} 
 = \frac{h(1)}{h} 
 = 1
```

## Solution