

### ACTION

### RESPONSE

#### Fluency



- 1) The bearing of point A from B is  $120^\circ$ . What is the three-figure bearing of B from A?
- 2) The bearing of point C from D is  $320^\circ$ . What is the three-figure bearing of D from C?
- 3) The bearing of point E from F is  $300^\circ$ . What is the three-figure bearing of F from E?
- 4) The bearing of point G from H is  $075^\circ$ . What is the three-figure bearing of H from G?
- 5) The bearing of point I from J is  $168^\circ$ . What is the three-figure bearing of J from I?
- 6) The bearing of point K from L is  $011^\circ$ . What is the three-figure bearing of L from K?
- 7) The bearing of point M from N is  $193^\circ$ . What is the three-figure bearing of N from M?
- 8) The bearing of point O from P is  $236^\circ$ . What is the three-figure bearing of P from O?

#### Reasoning



- 1) The cruise ship Princess Margaret was 20 kilometres from the port in Newcastle on a bearing of  $030$ . At the same time, the ferry North Star was 40 kilometres from Newcastle on a bearing of  $090$ . Work out the distance and bearing of the North Star from the Princess Margaret.
- 2) Two ships, *A* and *B*, leave port at 13 00 hours.  
 Ship *A* travels at a constant speed of 18 km per hour on a bearing of  $070^\circ$ .  
 Ship *B* travels at a constant speed of 25 km per hour on a bearing of  $152^\circ$ .  
 Calculate the distance between *A* and *B* at 14 00 hours.

#### Problem Solving



A ship sails from Marbella for 42 km on a bearing of  $125^\circ$  to point B. It then changes course and sails for 24 km on a bearing of  $040^\circ$  to point C, where it breaks down and anchors. What distance and on what bearing will a helicopter have to fly from Marbella to go directly to the ship?



# ACTION

# RESPONSE

### Fluency



- 9) The bearing of point A from B is  $120^\circ$ . What is the three-figure bearing of B from A?
- 10) The bearing of point C from D is  $320^\circ$ . What is the three-figure bearing of D from C?
- 11) The bearing of point E from F is  $300^\circ$ . What is the three-figure bearing of F from E?
- 12) The bearing of point G from H is  $075^\circ$ . What is the three-figure bearing of H from G?
- 13) The bearing of point I from J is  $168^\circ$ . What is the three-figure bearing of J from I?
- 14) The bearing of point K from L is  $011^\circ$ . What is the three-figure bearing of L from K?
- 15) The bearing of point M from N is  $193^\circ$ . What is the three-figure bearing of N from M?
- 16) The bearing of point O from P is  $236^\circ$ . What is the three-figure bearing of P from O?

### Reasoning



- 3) The cruise ship Princess Margaret was 20 kilometres from the port in Newcastle on a bearing of  $030$ . At the same time, the ferry North Star was 40 kilometres from Newcastle on a bearing of  $090$ . Work out the distance and bearing of the North Star from the Princess Margaret.
- 4) Two ships, *A* and *B*, leave port at 13 00 hours.  
 Ship *A* travels at a constant speed of 18 km per hour on a bearing of  $070^\circ$ .  
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 Calculate the distance between *A* and *B* at 14 00 hours.

### Problem Solving



A ship sails from Marbella for 42 km on a bearing of  $125^\circ$  to point B. It then changes course and sails for 24 km on a bearing of  $040^\circ$  to point C, where it breaks down and anchors. What distance and on what bearing will a helicopter have to fly from Marbella to go directly to the ship?

