RQ 1: What lunar phases would be visible in the sky at dawn?
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The waning phases: Full, waning gibbous, 3rd quarter, waning crescent.

At midnight?
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   The waning phases: Full, waning gibbous, 3rd quarter, waning crescent.

At midnight?
   The “fuller” phases: 1st quarter, waxing gibbous, full, waning gibbous, 3rd quarter

Prob 2: Identify the phases of the moon if at sunset in the Northern Hemisphere the moon is …
   (a) near the eastern horizon
   (b) high in the southern sky
   (c) in the south-eastern sky
   (d) in the south-western sky
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Prob 2: Identify the phases of the moon if at sunset in the Northern Hemisphere the moon is …

(a) near the eastern horizon Full
(b) high in the southern sky
(c) in the south-eastern sky
(d) in the south-western sky
RQ 1: What lunar phases would be visible in the sky at dawn?
   The waning phases: Full, waning gibbous, 3\textsuperscript{rd} quarter, waning crescent.

At midnight?
   The “fuller” phases: 1\textsuperscript{st} quarter, waxing gibbous, full, waning gibbous, 3\textsuperscript{rd} quarter

Prob 2: Identify the phases of the moon if at sunset in the Northern Hemisphere the moon is …
   (a) near the eastern horizon \textbf{Full}
   (b) high in the southern sky \textbf{1\textsuperscript{st} Quarter}
   (c) in the south-eastern sky
   (d) in the south-western sky
RQ 1: What lunar phases would be visible in the sky at dawn?
   The waning phases: Full, waning gibbous, 3rd quarter, waning crescent.

At midnight?
   The “fuller” phases: 1st quarter, waxing gibbous, full, waning gibbous, 3rd quarter

Prob 2: Identify the phases of the moon if at sunset in the
   Northern Hemisphere the moon is …
   (a) near the eastern horizon   Full
   (b) high in the southern sky   1st Quarter
   (c) in the south-eastern sky   Waxing Gibbous
   (d) in the south-western sky
RQ 1: What lunar phases would be visible in the sky at dawn?
   The waning phases: Full, waning gibbous, 3rd quarter, waning crescent.
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   (a) near the eastern horizon  Full
   (b) high in the southern sky 1st Quarter
   (c) in the south-eastern sky  Waxing Gibbous
   (d) in the south-western sky Waxing Crescent
Prob 3: About how many days must elapse between the first-quarter moon and the third-quarter moon?
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14 days
Supp 2: The calendar says the moon is a waning gibbous. You go outside at midnight. (a) In what part of the sky will you find the moon? (North, northeast, east, etc.)
western horizon

southwest

high in the south

southeast

eastern horizon
Supp 2: The calendar says the moon is a waning gibbous. You go outside at midnight. (a) In what part of the sky will you find the moon? (North, northeast, east, etc.)

In the southeast

(b) At around what time would you expect the moon to set?
Supp 2: The calendar says the moon is a waning gibbous. You go outside at midnight. (a) In what part of the sky will you find the moon? (North, northeast, east, etc.)

In the southeast

(b) At around what time would you expect the moon to set?

9AM

Supp 3: It’s daylight and you watch a quarter moon setting.

(a) Which is it, a 1st quarter or a 3rd quarter?

(b) About what time of day is it?
Supp 2: The calendar says the moon is a waning gibbous. You go outside at midnight. (a) In what part of the sky will you find the moon? (North, northeast, east, etc.)

In the southeast

(b) At around what time would you expect the moon to set?

9AM

Supp 3: It’s daylight and you watch a quarter moon setting.

(a) Which is it, a 1st quarter or a 3rd quarter?

(b) About what time of day is it?

It’s a 3rd quarter moon at noon.
Supp 4: If the date is March 21st and the moon is in the position of the summer solstice then what phase is it? (Hint: Look at the figure in the top right corner of page 24 and look at the figure on the left of page 34.)
Supp 4: If the date is March 21st and the moon is in the position of the summer solstice then what phase is it? (Hint: Look at the figure in the top right corner of page 24 and look at the figure on the left of page 34.)

1st quarter

Supp 5: Astronomers say that the Moon is tidally locked to the Earth. Look at diamond-1 on page 34 and explain what tidally locked means.
Supp 4: If the date is March 21st and the moon is in the position of the summer solstice then what phase is it? (Hint: Look at the figure in the top right corner of page 24 and look at the figure on the left of page 34.)

1st quarter

Supp 5: Astronomers say that the Moon is tidally locked to the Earth. Look at diamond-1 on page 34 and explain what tidally locked means.

The rotation (spin) is synchronized with the revolution (orbit) so that it always has one side pointing inward.