SA HW1

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Q1

The correct classes are: (a), (d) and (e).
(b) is incorrect because the method setColor declared as abstract, but has a body.
(c) is incorrect because interfaces can't be extended.

Q2

(a) is correct.
(b) is incorrect because String is incompatible type with Plant and therefore can't be overridden.
(c) is correct.
(d) is correct.
(e) is incorrect because type of the returning value doesn't match the method type, also because of the same reason as (b).

Q3

The result id (d) 9.
The value of y preserves as it is a static member of the class.

Q4

(a) will compile.
(b) will compile.
(c) won't compile as Dog is a wider class than PitBull.

Q5

(a) won't compile as there is no signature for do2 in X.
(b) will compile.
(c) won't compile as method call has a higher priority than typecast.